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SMITHSONIAN INSTITUTION

UNITED STATES NATIONAL MUSEUM

BULLETIN 249

WASHINGTON, D.C.

1968

MUSEUM OF HISTORY AND TECHNOLOGY

CONTRIBUTIONS FROM THE MUSEUM OF HISTORY AND TECHNOLOGY

Papers 52–54
On Archeology

SMITHSONIAN INSTITUTION • WASHINGTON, D.C. 1968

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The *Proceedings*, begun in 1878, are intended for the publication, in separate form, of shorter papers from the Museum of Natural History. These are gathered in volumes, octavo in size, with the publication date of each paper recorded in the table of contents of the volume.

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The present collection of Contributions, Papers 52–54, comprises *Bulletin* 249. Each of these papers has been previously published in separate form. The year of publication is shown on the last page of each paper.

Frank A. Taylor
Director, United States National Museum

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On Archeology

Contributions from
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Paper 52

Excavations at Clay Bank in Gloucester County, Virginia, 1962–1963

Ivor Noël Hume

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Figure 1.—Detail from Augustine Herman's map of Virginia which was published in 1673.

Excavations at CLAY BANK in Gloucester County, Virginia, 1962–1963

This paper describes and analyzes artifacts recovered from the Jenkins site at Clay Bank, Gloucester County, Virginia. The building which overlay the excavated cellar hole does not appear on any known map. Among the number of interesting objects recovered was a large stem and foot from an elaborate drinking glass or candlestick of fine quality English lead metal. It was found in association with crude earthenwares, worn out tools, and broken and reused clay tobacco pipes, suggesting that this material was derived from various sources.

THE AUTHOR: *Ivor Noël Hume is director of archeology at Colonial Williamsburg and an honorary research associate of the Smithsonian Institution.*

EARLY IN JANUARY 1962 a brick foundation was discovered at Clay Bank in Gloucester County following the removal of a walnut tree beside the residence of Mr. William F. Jenkins. The tree was of no great antiquity but the foundation beneath it was thought by Mr. Jenkins to be worthy of archeological examination. The author, therefore, visited the site late in the same month and found that the brick footings were certainly of colonial date. From the small collection of ceramics and other artifacts also exposed by the tree, there was reason to suppose that the building had ceased to exist late in the 17th or perhaps early in the 18th century.

The site lay on the north bank of the York River on rising ground immediately west of Clay Bank landing. Little or nothing was known about the property in the colonial period and it was apparently identified on no known maps or land plats. However, the fact that it was adjacent to part of the 18th-century Page family plantation (whose mansion house had been included in previous archeological work[1]) and because the Clay Bank site gave promise of yielding information regarding domestic life in the late 17th century, the author decided to undertake limited excavation in the area of the structure.

With the assistance of local volunteer labor and the archeological staff of Colonial Williamsburg, two trenches were dug, one exposing a larger area of the brick foundation, and the other parallel to it some 11 feet to the west in the direction of the river. The first

[1] IVOR NOËL HUME, "Excavations at Rosewell, Gloucester County, Virginia 1957–1959" (paper 18 in *Contributions from the Museum of History and Technology: Papers 12–18*, U.S. National Museum Bulletin 225, by various authors; Washington: Smithsonian Institution, 1963), pp. 153–228. Hereafter cited as *Rosewell*.

cutting revealed the remains of a massive brick chimney measuring 10 feet 2 inches by 6 feet using oystershell mortar and laid in English bond. The brickwork was not bonded to, or abutting against, any wall foundation and it was therefore presumed that the building to which it belonged had stood on piers.

The second trench cut through mixed strata of sand, black soil, and scattered oystershells extending downward to a depth of at least 3 feet 9 inches, at which level a thick layer of shells was found. In the top of the shell stratum were fragments of glass wine bottles of the late 17th century and parts of an iron can. It was clear that the trench was not wide enough to enable the artifacts to be studied in situ or removed in safety, and consequently work was halted until the project could be developed into an area excavation.

Both the stratigraphy and the similarity in date of artifacts from top to bottom of the test trench strongly indicated that we were cutting through one deposit, probably the filling of a cellar belonging to the same building as the large brick chimney to the east. Remembering the huge quantities of artifacts that had been recovered from a single hole at neighboring Rosewell, it was hoped that yet another significant contribution would be made to the archeology of colonial Virginia. But in the final analysis the Clay Bank site was to prove less rich and less historically important (owing to a lack of adequate documentation) than had been anticipated. On the credit side, however, it did contribute new facts relating to building construction in 17th-century Virginia, as well as yielding a series of closely dated tools and miscellaneous artifacts, plus one piece of glass that is not only without parallel in America, but which is of sufficient importance to merit a place in the annals of English glass. For this one object alone, the Clay Bank project would have been eminently worthwhile.

Historical Background

Archeology may be termed the handmaiden of history in that it is truly the servant of the historian, providing information that is not to be gleaned from documentary records. At best it is a poor substitute for the written word, but when the two are used together the pages of history may acquire an enlivening new dimension. This is particularly true of American colonial history where the documentation often is extremely full.

Unfortunately Gloucester County was one of those whose Court Records were destroyed during the Civil War, and it is difficult and often impossible to establish property histories over an extended period of time. However, it is debatable just how much of the blame can be laid at the doors of war, as many of the county's colonial records had already been destroyed in a fire at the clerk's office of the Gloucester courthouse in 1820.

No acceptable evidence has been found to definitely identify the original owner or the name of the building revealed by the 1962 excavations, though it has been supposed that the adjacent "Arludwy" (the present home of Mr. and Mrs. Jenkins) was originally named "New Bottle" and was built by Robert Porteus at the beginning of the 18th century. It was hoped that artifacts found on the site might provide evidence to support the Porteus association, but nothing conclusive was forthcoming. The only conceivable shred of evidence, thin to the point of transparency, was provided by a handsome 17th-century latten spoon bearing a thistle as its touchmark, suggesting, perhaps, that it was made by a Scots craftsman. As the family of Edward Porteus, the emigrant and father of Robert Porteus, came from New Bottle in Scotland, it might be argued that the spoon was among Edward's possessions when he arrived in Virginia. Such a deduction is readily assailable, but it is no more so than much other "documentation" relating to the Porteus family in Virginia.

The distinguished Gloucester County historian, Dr. William Carter Stubbs undertook considerable research into the history of the Porteus family, the results of which may be summarized as follows: Edward Porteus was living in Gloucester County by 1681 in which year he married the widow of Robert Lee. He died in 1694 leaving a widow and one son, "Capt." Robert Porteus who became heir to "New Bottle" plantation. Robert married the daughter of John Smith of "Purton" and after her death he married a daughter of Governor Edmund Jennings of "Rippon Hall" in York County. His two wives bore him 19 children, the best known of whom was Beilby Porteus who was born in 1731 after Robert had returned to England (in about 1727) to live at York. Beilby Porteus became Bishop of Chester and then of London, and died in 1808. Robert lived on in York until his death in 1758.[2]

The location of "New Bottle" has been the subject

[2] Dr. & Mrs. William Carter Stubbs, *Descendants of Mordecai Cooke and Thomas Booth* (New Orleans, 1923), p. 14 (footnote).

of dispute for many years, and as the recent excavations have done nothing to resolve the matter, it is not necessary to explore the conflicting opinions and evidence in detail. It is enough to recall that the *Vestry Book of Petsworth Parish*[3] clearly places Robert Porteus in the Second Precinct which extended from Bennit's Creek up the York River to Jones' Creek. The First Precinct had begun at Clay Bank Creek and had reached to Bennit's Creek. Today most of these names have been changed; Clay Bank Creek is marked as Aberdeen Creek, the creek at Clay Bank which was apparently originally known as Bennit's Creek now has no name at all, and only Jones' Creek remains the same.

The only extant map that shows both Clay Bank Creek and Bennit's Creek is the Augustine Herman map of Virginia and Maryland published in 1673 (fig. 1). But this shows Bennit's Creek as being as long as the present Jones' Creek, while the latter is omitted from the map altogether. However, as the parish records delineating the bounds of the precincts in 1709 refer to both Bennit's Creek and Jones' Creek there cannot have been any confusion between them. It is therefore reasonably well established that the Porteus property lay between those creeks, which would place it north of the modern community of Clay Bank and south of Jones' Creek. Although it has not been proved that the Porteus land included the York River frontage, it is reasonable to suppose that it did. Thus, if that conjecture is accepted, it becomes highly probable that the present "Ardudwy" and the adjacent early foundation are on what were once Porteus acres.[4] The Porteus family continued to own this or other land in the Second Precinct until at least 1763 as the bounds of that precinct were ordered to be processioned in 1751, 1755, 1759 and 1763 beginning "on the Land of Rob[t] Porteus Esq[r]."[5] As Robert Porteus never returned to Virginia after 1727 and died in 1758, it must either be assumed that the plantation was taken over by a son or that it was operated by a tenant or manager on "Capt." Robert Porteus' behalf. In the absence of any other documentation indicating the presence of any members of the Porteus family in Gloucester after October 1725,[6] the latter construction seems most reasonable. The continuing references to Robert Porteus' land in the Second Precinct until 1763 may be explained as referring to the estate of the late Robert Porteus.

[3] *Vestry Book of Petsworth Parish, Gloucester County, Virginia 1677-1793*, annotated by C. G. Chamberlayne, The Library Board (Richmond, 1933), p. 97. Hereafter cited as *Vestry Book*.

[4] *Records of Colonial Gloucester County Virginia*, compiled by Polly Cary Mason (Newport News, 1946), vol. 1. p. 86. The Gloucester rent roll of 1704 showed Robert Porteus owning 892 acres and Madam Porteus (presumably his widowed mother) with 500 acres. The latter may have been situated elsewhere in the parish and have been property inherited by her at the death of her first husband, Robert Lee.

[5] *Vestry Book*, pp. 284, 295, 304, 318.

[6] *Vestry Book*, October 6, 1725, pp. 186–187. "Petso Parish Detter this Year in Tobacco . . . To Robert Portuse Esq[r] for Keeping Two barsterd Children viz[t] John & Watkinson Marvil 01333 $^{1}_{2}$"

ACKNOWLEDGMENTS

I am greatly indebted to Mr. and Mrs. William F. Jenkins for drawing the Clay Bank site to my attention, for permitting me to do considerable damage to their garden in the course of its excavation, and for generously presenting the illustrated artifacts to the Smithsonian Institution. I also owe much to their daughter Mrs. William DeHardit for valuable historical information as well as for her constant and vigorous assistance with the actual digging. I am equally grateful to my wife, Audrey Noël Hume, and to Mr. John Dunton of Colonial Williamsburg for their part in the excavation, also to Mr. A. E. Kendrew, senior vice president of Colonial Williamsburg, and Mr. E. M. Frank, its resident architect, for their comments on both the chimney foundation and on the age of the existing house. I am also indebted to Mrs. Carl Dolmetsch of Colonial Williamsburg's research department for her pursuit of cartographic evidence.

In addition I wish to express my thanks to Mr. R. J. Charleston, keeper of ceramics and glass, Victoria and Albert Museum, London, for examining and commenting on the glass, and to Mr. W. D. Geiger, director of craft shops, Colonial Williamsburg, for similar assistance in identifying the tools.

Finally, I am indebted to Miss Elizabeth Harwood of Aberdeen Creek for permission to illustrate examples of tobacco pipes found on her land, and to Colonial Williamsburg for subsidizing the preparation of this report.

May 1965 I. N. H.

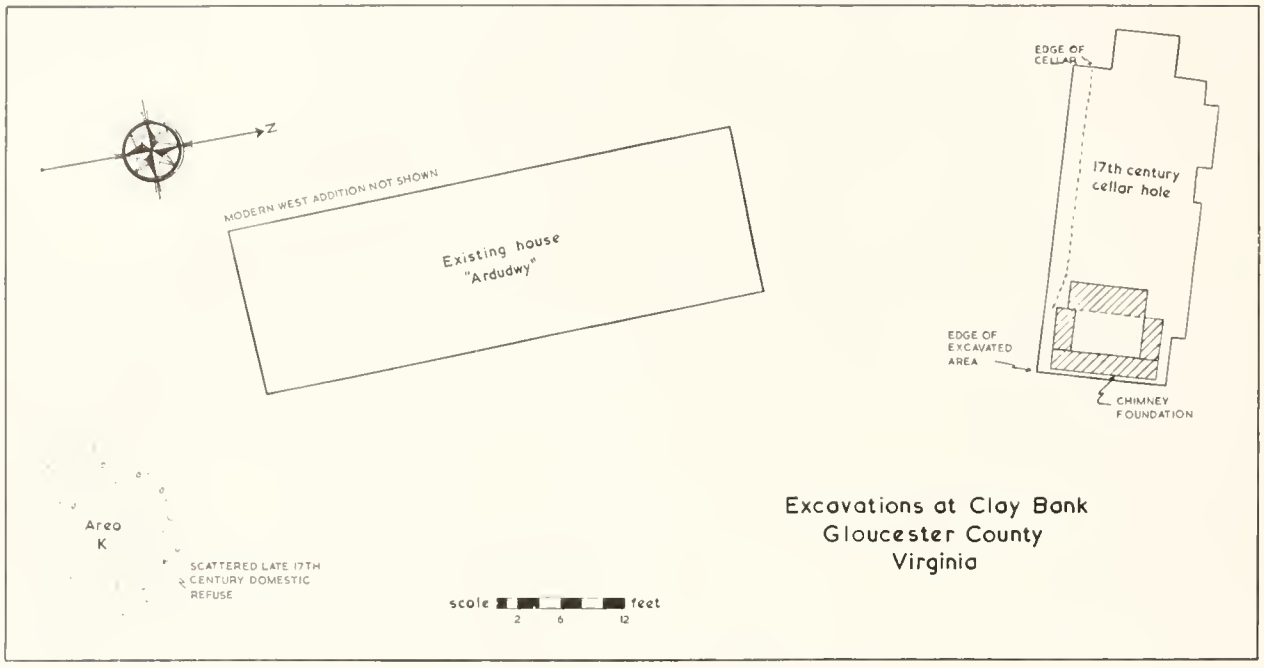

Figure 2.—Plan of excavations in relation to the existing house.

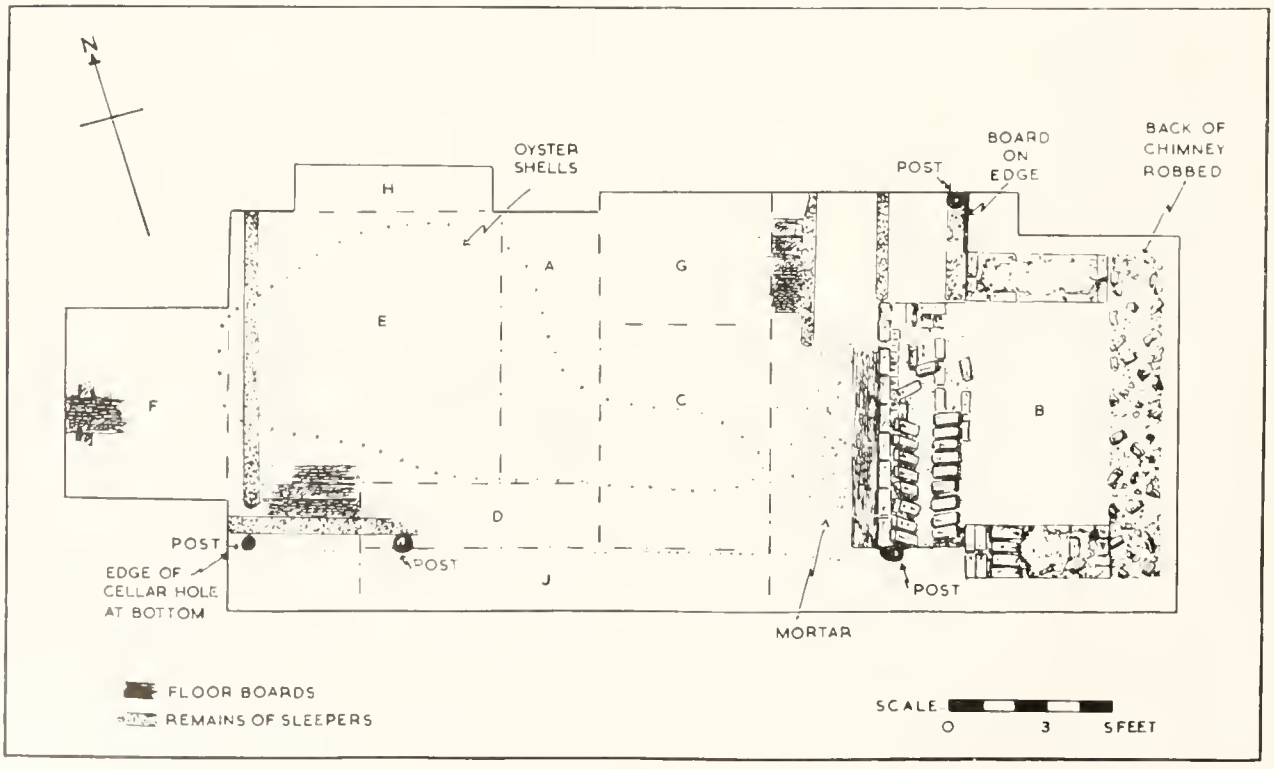

Figure 3.—Plan of excavated areas and structural remains.

Even if the modern Jenkins property is accepted as having been part of the Porteus plantation it does not necessarily follow that either the excavated foundation or the much modernized "Ardudwy" represent the remains of the Porteus house. However, there may be some grounds for arguing that the foundation and cellar hole were part of the house of Edward Porteus the emigrant. According to legend, Robert Porteus' property had once belonged to a Dr. Green at whose house Nathaniel Bacon died in 1676.[7]

Clues to the appearance of Robert Porteus' house are provided by an entry in the *Petsworth Parish Vestry Book* for November 12, 1704. There it was recorded that the church-wardens drew up an agreement ". . . wth Ezra Cotten for y^{e} building of a gleebhouse & a kitchen y^{e} S^{d} house to be of y^{e} Same Dementions as M^{r} Rob^{t} Pourtees. & to be framed on Good white oak Sills and to Stand upon blocks & to be lath^{d}. wth Goo[ ] oak lathes and Shingled wth Good Siprus Shingles The S^{d} house to be 36 foot in Length & 20 foot wide, y^{e} Roof to be 18 Inches Jet and to have two outSide Chimnies and two Closets adjoyning to them, and all things Ells pertaining according to y^{e} Dementions of y^{e} above S^{d} Rob^{t} Pourtees house, Viz, y^{e} above S^{d} Kitchin to be foot Long & foot wide".[8]

The two important features of these instructions are the measurements of the building and the fact that it was raised on blocks and, therefore, did not have a walled basement beneath it. But while the measurements are stated to be those of the Porteus House, it does not necessarily follow that the elevation of the glebe house on blocks also drew its precedent from that source.[9] However, if it did, then the modern "Ardudwy" could not have been the Porteus home as this building not only measures 47 feet 3 inches by 15 feet 10 inches, but it is also built over a substantial brick-walled basement. On the other hand, the excavated cellar hole (though apparently having ended its life prior to about 1700) was almost certainly part of a building built on blocks or piers.

It seems reasonable to suggest that Ezra Cotten was assumed by the churchwardens to know more about the Porteus House than was given in their specifications, in which case it might be supposed that he had actually built that house. By extension it might also be assumed that the job had been completed a comparatively short while before the building of the glebe house was proposed. Therefore, if it can be established that Robert Porteus built himself a new house not too long before November 1704, it would probably follow that he had lived in his father's old house until that time. If Edward's house was then destroyed, it would certainly add further support to the theory that the excavated remains are part of that building.

Unfortunately, there seems little likelihood of obtaining any additional information regarding either the site of, or the appearance of Robert Porteus' house. The glebe house does not survive, having been abandoned in 1746,[10] and the only other potential source of information has seemingly been lost. The Reverend Robert Hodgson in his *The Life of the Right Reverend Beilby Porteus*[11] stated that the bishop possessed ". . . a singular picture which, though not in the best style of coloring, was yet thought valuable by Sir Joshua Reynolds, as a specimen of the extent which the art of painting had reached at that time in America: and he himself very highly prized it, as exhibiting a faithful and interesting representation of his father's

[7] *William & Mary Quarterly* (1896), ser. 1, no. 5, p. 279. "Oldmixon says that Bacon died at Dr. Green's in Gloucester, and Hening describes this place in 1722 as 'then in the tenure of Robert Porteus Esq.' " But as Robert Porteus purchased additional land in 1704, Dr. Green's home site may not have been the same as that of Edward Porteus.

[8] *Vestry Book*, p. 85. The kitchen measurements are absent.

[9] *Vestry Book*, pp. 74–75. At a previous vestry meeting on 28th June, 170[2?] details of the proposed glebe house were given as follows: "Six & thirty foot Long & twenty foot wide with two Outside Chemneys two 8 foot Square Clossetts planckt above & below, with two Chambers above Staires and y^{e} Staires to Goe up in y^{e} midst of y^{e} house with 3 Large Glass windows Below Stair [ ] Each to have 3 Double Lights in y^{m} with a Glass window in Each Chamber above Staires Each to have 3 Lights in y^{m} & Each Clossett to have a window in it and Each window to have 3 Lights." There is no evidence that these specifications were derived from Robert Porteus' house.

[10] *Vestry Book*, p. 273. May 28, 1746: "Ordered this Present Vestry, have thought it Better to Build a New Glebe house rather then to Repair the old one . . . ." Then follow specifications for the new building.

[11] Robert Hodgson, *The Life of the Right Reverend Beilby Porteus D.D.* (London, 1823) pp. 3–4. Hodgson describes Newbottle in the following terms: "It consisted chiefly of plantations of tobacco; and on one of these, called Newbottle (from a village of that name near Edinburgh, once belonging to his family, but now in the possession of the Marquis of Lothian), he usually resided. The house stood upon a rising ground, with a gradual descent to York river, which was there at least two miles over: and here he enjoyed within himself every comfort and convenience that a man of moderate wishes could desire; living without the burthen of taxes, and possessing, under the powerful protection of this kingdom, peace, plenty, and security."

residence." This last statement is assumed to be hearsay as Beilby Porteus was born in England in 1731 and did not, as far as we know, ever visit Virginia. Attempts to find the picture have met with no success [12] and in all probability it has long since been destroyed or at best, robbed of its identity.

Archeological and Architectural Evidence

It is not within the purpose of this paper to include an architectural study of "Ardudwy." Neither the building's measurements nor its basement lend credence to the belief that it was once the home of Robert Porteus. In addition, the 1704 specification called for exterior chimneys while those of "Ardudwy" are interior. The basement walls use shell mortar and include bricks of widely varying sizes, but although many of them have an early appearance, they may well have been reused from elsewhere. Interior details such as mantels and doors would seem to date from the early 19th century. What little of the framing that is visible is pegged but is liberally pierced with both wrought and cut nails. All in all, it seems probable that "Ardudwy" was built in the very late 18th or early 19th century. Archaeological evidence supports this belief in that the property is richly scattered with artifacts of the late 17th century and of all dates after about 1800, but has yielded very few items that can be attributed to the 18th century. All appearances point to the abandoning of the immediate area as a habitation site after the destruction of the excavated building around 1700. The subsequent building of "Ardudwy" so close to the early house may be assumed to be coincidental, though the site is certainly a desirable and obvious location for a residence.

Little information as to the above ground appearance of the 17th-century structure was forthcoming, partly because it had almost certainly stood on piers or blocks, and partly because the excavations were restricted by limitations of time, labor, and the desire of the owners to retain at least something of their garden. Neither extensive probing nor a soil resistivity survey revealed evidence of a second chimney, nor did they give any clues as to the total length or breadth of the cellar hole. The back wall of the chimney had been deliberately dismantled and only a thin skin of brickbats and mortar on the bottom of the robber trench survived to mark its position. It is therefore quite possible that another chimney was dismantled with sufficient completeness to elude discovery by either of the exploratory methods used.

The jambs of the partially surviving chimney (fig. 4) were laid in English bond and were 1 foot 7 inches thick and 4 feet 4 inches long.[13] The interior width of the fireplace measured 7 feet, which was large by 18th-century domestic standards, but not uncommon in the 17th century before separate kitchens became the rule.[14] Both jambs were built into the side of the cellar hole and were seated on a bed of small rocks,

[12] A request for information was published in the English magazine *Country Life* (May 24, 1962), vol. 131, no. 3403, p. 1251. This yielded a reply from the Reverend W. B. Porteus of Garstang Vicarage, Nr. Preston, Lancashire. He noted that Bishop Beilby Porteus was buried at Sundridge in Kent and that prior to the Second World War family connections of the Bishop's wife named Polhill-Drabble still lived in that village and were deeply interested in their lineage. The Rev. Porteus feared that Mr. and Mrs. Polhill-Drabble were now dead, and as I have been unable to trace them, I assume that this is the case.

Figure 4.—The chimney and underhearth foundation.

[13] Seven courses surviving, top at 2 ft. 2 in. below modern grade. Shell mortar. Specimen bricks: 9 in. by 4¼ in. by 2⅞ in. (salmon) and 7½ in. by 4¼ in. by 2 in. (dark red).

[14] A late 17th- or very early 18th-century house at Tutter's Neck in James City County, measuring 42 ft. 3 in. by 19 ft. 1 in., possessed a chimney at either end with dimensions of 9 ft. 11 in. by 4 ft. 11 in. and 9 ft. 9 in. by 5 ft. The jambs varied in thickness from 1 ft. 6 in. to 1 ft. 11 in. See footnote 22.

but the robbed backwall had rested only on the natural sandy clay at a depth of 2 feet 3 inches below the modern grade. In front of the chimney, and rising from the cellar floor, was a massive brick-walled underhearth 7 feet 6 inches wide and projecting out from the fireplace to a distance of 5 feet.

A curious and still unexplained feature of the underhearth was a 4- by 3-inch channel running across the top of the surviving foundation for a distance of 6 feet 9 inches, starting at the south face and terminating 9 inches short of the north. This channel had been bricked over and the remaining bricks had dropped into it (fig. 5) presumably after a wooden beam, which once occupied the space, had rotted or burned out. Traces of burned or carbonized wood lay on the clay bottom of the channel, but the bricks over it displayed no evidence of fire. The only conceivable explanation for the presence of the wood must be that it was part of a frame used to hold the block of natural sandy clay together while the underhearth wall was being erected around it. As the underhearth foundation would have originally risen at least another 2 feet 6 inches above the timber to the floor level of the house, the wood would not have been in danger of igniting from the heat of the domestic fire. But if the house ultimately burned, it is possible that the exposed end of the timber might have caught fire and slowly been consumed along its entire length.

The cellar hole had been cut into natural sandy clay to an average depth of 5 feet 3 inches below the modern grade. Its backfilling was predominantly of the same sandy clay and, consequently, the exact edge of the cellar hole was sometimes hard to determine. It was probably because of this similarity between the natural subsoil and the cellar's fill that the feature failed to show up in the soil resistivity survey. Owing to previously mentioned limiting factors, only the southeast corner of the cellar hole was found and only parts of the south and east walls were traced out. Consequently, it can merely be said that the cellar exceeded 27 feet in east-west length and 11 feet 2 inches in width (fig. 3).

Three post holes were found against the south face, while the rotted remains of another vertical post were found north of the chimney supporting a much-decayed horizontal board that had served to revet the east face. A broad-bladed chisel (fig. 14, no. 6) was found behind the board where it had probably been lost while the timbering was being installed.

Further slight traces of horizontal boards were found along the south face, suggesting that the soft sides of the large cellar hole had been supported in this way. But it was not possible to determine whether the boards had been placed only on sections of the wall that seemed in danger of sliding in or whether the entire interior had been sheathed with planks. The south side of the cellar hole sloped outwards at an approximate 65 percent angle and the traces of boards lay against it.[15] However, it was not possible to tell whether the vertical posts had been similarly sloped, but it is reasonable to assume that they would have done so.

Parts of the cellar's wooden floor still survived (figs. 6 and 7) and comprised boards ranging in width from 5 to 7 inches laid over sleepers or joists 4 to 6 inches wide. The height of the underlying timbers could not be determined as the weight of the cellar fill might be assumed to have pressed the floorboards down as the wood of the sleepers decayed. Only occasional floorboards survived and the channels left by decayed sleepers did not extend across the full width of the excavated cellar. From these facts it was deduced that the boards had been cut from woods of different types, some of which had decayed more completely

[15] Albert C. Manucy, "The Fort at Frederica," Notes in *Anthropology* (Tallahassee: Florida State University, 1962), vol. 5, pp. 51–53. An excavated powder magazine of 1736 exhibited similar construction.

Figure 5.—Detail of collapsed bricks in the underhearth. (*Photo courtesy of E. DeHardit.*)

than others, and that the sleepers were made from short and sometimes roughly cut lengths of timber. These sleepers may, in fact, have served only as a base for anchoring the ends of floorboards, as was certainly the case northwest of the underhearth where the nails from the ends of five boards had dropped through into the channel left by the decayed sleeper. It may be supposed, therefore, that the sleepers' location would have been dictated by the vagaries of board length rather than by the design of a planned, measured foundation and that they served as ties for the floor, rather than joists raising it off the natural clay beneath.

In addition to the remains of the carefully laid floor, another much-decayed board, 10 inches wide, and of uncertain thickness, was found running north/south immediately west of the underhearth. This board was partially covered by mortar, suggesting that it had been set on the dirt during the building of the brick structure.

The filling of the cellar in the vicinity of the chimney and underhearth comprised a single massive deposit of sandy clay, scattered through which were numerous iron nails, isolated oystershells and occasional fragments of pottery, glass, and tobacco-pipe stems. A similar unified filling was encountered at the western end of the excavation, but towards the middle a large and irregular deposit of oystershells was sealed within the sand at a depth of 4 feet 6 inches sloping upward to 3 feet 6 inches towards the south wall. The shell layer averaged from 6 to 9 inches in thickness and was found to contain many of the more important artifacts.

Figure 6.—Remains of wooden floor boards in the cellar. (*Photo courtesy of E. DeHardit.*)

On the wooden floor of the cellar lay a thin ½- to 1-inch layer of wood ash, mortar, and occasional brickbats. Had this accumulation been considerably thicker it might have suggested that the building above had been destroyed by fire. But although the presence of this skin of debris could not be explained, it was far from sufficient to support such a conclusion.

The topsoil over the entire area had been disturbed to a depth of at least 1 foot, presumably by deep plowing. Over the cellar fill, humus and a sandy loam extended to a depth of 1 foot 8 inches at the south edge and to 2 feet 1 inch in the middle. The bottom of this stratum contained nothing but late 17th- or early 18th-century artifacts, including an important and well-preserved latten spoon.[16] A small 19th-century disturbance cut into the south cellar edge towards the west end of the excavation, but caused little disturbance to the main fill. Another, much larger, late 19th-century trash deposit had been dug into the fill to the northwest of the chimney and this had reached to a depth of 3 feet 6 inches below the modern grade. The removal of the walnut tree had created a similar disturbance immediately south of the refuse deposit, while a trench for a 20th-century water pipe had cut yet another slice through the same area. None of these disturbances had caused any damage to the lower filling of the cellar.

DATING EVIDENCE FOR THE CELLAR

The majority of the excavated artifacts were scattered throughout the cellar fill and were of similar types from top to bottom of the deposit. These objects included wine-bottle and drinking-glass fragments, potsherds of English and perhaps Portuguese tin-enamelled earthenware, and more that 600 tobacco-pipe fragments, all of them indicating a terminal date of about 1700. A quantitative analysis of the tobacco-pipe stem fragments using the Binford formula[17] provided a mean date of 1698.

Method of Excavation

Digging was initially confined to the immediate vicinity of the chimney foundation (Area B on fig. 3) and to the previously described test trench (A). An east/west trench (D) was next dug to link the two and to isolate the disturbed areas of the tree hole and 19th-century pit in Areas C and G.

[16] E2. Figure 12, no. 1.

[17] See footnote 27.

Owing to a shortage of labor and the rigors of the weather, it was necessary to confine the digging to small areas which could be completed in a single day's work. Consequently, it was not possible to clear the whole area, as one part would be back-filled during the digging of the next. Mr. and Mrs. Jenkins, the owners of the property, were extremely tolerant of the damage that was done to their gardens, but after the clearance of the large area E, they indicated that the project had gone far enough. Nevertheless, they were persuaded to permit the cutting of another smaller test area to the west (F), but when this, too, failed to find the westerly extremity of the cellar, the project was abandoned. Subsequently, relatives of the owners cut into the exposed north face of area E and extracted a number of potsherds and other fragmentary objects from the sand filling.[18] The undercutting of the bank extended to a distance of 1 foot 6 inches without encountering the north edge of the cellar, thus showing that the total width was in excess of 14 feet.

Extensive probing all around the total area of excavation failed to produce any further traces of the building, though the 1 foot 8 inches of topsoil and sandy loam was found to be bedded on numerous small deposits of oystershells and scattered brickbats. Test holes found that all the located deposits north and west of the existing house had been laid down or disturbed in the 19th century. Five test traverses with a soil resistivity meter west and south of the excavation area produced numerous anomalies which, when checked out, all failed to be associated with the 17th-century cellar. It seemed that the misleading readings were caused by variations in the density and moisture-retaining qualities of the natural sandy clay subsoil.

Early in 1963, while planting a small tree to the south of the existing house, Mr. Jenkins encountered a stratum of oystershells at approximately 8 inches below the present grade. (Fig. 2, Area K.) A series of small test holes was subsequently dug to the south and southeast of the house, and showed that the layer of shells (average thickness 4 inches) overlay the subsoil and was spread over an area at least 15 by 10 feet. A small number of 19th-century pottery fragments were found mixed into the stratum, but the vast majority of the artifacts comprised bottle glass and earthenwares of similar types to those encountered in the cellar hole excavation.[19] The most important item was a pewter spoon handle of late 17th-century character (fig. 15, no. 27) stamped with the initial "M." The presence of this obvious domestic refuse was not satisfactorily explained, but it is concluded that it was originally deposited on the land surface and later disturbed by cultivation.

Landscaping work towards the York River west of the house had yielded a few widely scattered fragments of colonial and Indian pottery as well as numerous 19th-century sherds. The colonial material was predominantly of late 17th- or early 18th-century date, but two sherds of Staffordshire combed dishes were of a type unlikely to date before about 1720. No archeological digging was undertaken in these areas.

Archeological Stratigraphy

Each excavated area was given an identifying letter (fig. 3) and each stratum a number. Thus an artifact marked "B2" was found in the archeological area that contained the chimney and was recovered from the top stratum of sandy loam and clay. It should be

[18] The undercutting is shown on the plan (fig. 3, area 11) as a straight-edged unit. This has been done for the sake of neatness, but it should be noted that there was actually a series of holes that presented an extremely ragged appearance.

[19] An unusual lead-glazed earthenware rim sherd from a jar was probably from the same pot as other fragments (fig. 15, no. 14) found in the cellar hole.

Figure 7.—Remains of decayed board on floor in front of underhearth. (*Photo courtesy of E. DeHardit.*)

noted that not all layers and deposits tabled below were encountered in any one excavation area, while some were confined to single locations.

1. Topsoil and brown loam to 1 foot 8 inches over cellar hole.
2. Sandy loam merging into top of sandy clay fill or silting, spreading over edges of cellar hole and sealing the chimney remains. About 1690–1700 with some top disturbance.
3. Main sandy clay fill, extending to oystershell deposit in central areas. About 1690–1700.

3A. Sandy clay fill extending to within 6 inches of floor in Area B, against wall north of chimney. The same as Strata 3–5 but without the oystershell layer that divided them elsewhere. About 1690–1700.

3B. Sandy clay as above, but from areas where Stratum 4 was absent. About 1690–1700.

4. Oystershell deposit in Areas A, C and E, sealed by sandy clay Stratum 3. About 1690–1700.
5. Sandy clay under oystershell layer, reaching to cellar floor. About 1690–1700.
6. Ash and sand layer on remains of cellar floor; principal artifacts concentrated against south face of cellar hole in Areas D and E. About 1690–1700.

6A. Similar layer to Stratum 6, confined to Area B north of the chimney and underhearth foundation. About 1690–1700. (The same number is given to a chisel found behind a horizontal wall board at this level, but which may have been deposited when the cellar was built rather than at its date of abandonment. Fig. 14, no. 6.)

7. Objects lying in slots left by rotted-floor sleepers. About 1690–1700.
8. Late disturbance at southwest corner of excavation, Area E. 19th century.
9. 3-inch layer of light-grey soil beneath Stratum 2 extending down to top of oystershell layer (4) from southwest; confined to Areas E and F. About 1690–1700, possibly disturbed at upper west edge.
10. Unstratified material from all areas of the cellar-hole excavation, derived from frost disturbances and the results of removing the walnut tree.
11. Finds from oystershell and artifact layer beneath topsoil southeast of the existing house. About 1690–1700 with a few much later intrusions. (Area K, fig. 2.)
12. Surface finds recovered from field west of existing house.

The Artifacts

The collection of objects from the Clay Bank cellar hole is important for a small number of rare items and because the deposit provided accurate dating for a much larger group of less impressive artifacts. Unfortunately, neither category included pieces that were of much help in establishing anything of the history of the property.

A small cannonball of the 3-pound type used by light fieldpieces of the minion class was found in the top of the sand stratum (D3) against the south face of the cellar. Guns of this caliber may well have been used during Bacon's Rebellion, and there might be some who would care to use the excavated ball to support the legend that Bacon died at Clay Bank. The ball, it has been argued, could have been left behind by Bacon's forces when they vacated the site in the fall of 1676. However, such a conjecture, based on so little evidence, can hardly be taken seriously.

The single clue pointing to a Porteus family association, the latten spoon with its presumed Scottish mark, hardly merits any more serious consideration than the cannonball. Somewhat more tenable, however, may be the suggestion furnished by two artifacts, that the cellar hole was in the vicinity of a cooper's workshop. The objects in question were a "chisel" (fig. 14, no. 7) used specifically for driving down barrel hoops, and a race knife (fig. 12, no. 3), a tool frequently used by coopers to mark the barrels. No documentary evidence has been found to indicate the presence of a cooper in the Second Precinct of Petsworth Parish in the late 17th century though the Vestry Book does contain an entry for October 4th, 1699, ordering an orphan to be indentured to a cooper in King and Queen County.[20]

Other tools from the Clay Bank cellar included spade and hoe blades, a large wedge, and a carpenter's chisel, a range of items that did nothing to support a coopering association, but which did tend to indicate that the artifacts might have come from a variety of sources.

The pottery included a high percentage of coarse earthenwares, among which were fragments of two, or possibly three, lead-glazed tygs and a similarly glazed cup (fig. 15, nos. 7, 8, and 9), all objects that would have been best suited either to a yeoman's household or to a tavern. The large quantity of

[20] *Vestry Book*, p. 56. "Necholas Lewis" indentured to "Henry Morris of Straten Major in y^e^ County of King and Quine . . . to Learn y^e^ said orphant y^e^ art of Coopery."

tobacco-pipe fragments present might support the latter construction but the dearth of wine-bottle pieces does not. Numerous fragments of English delftware were found scattered through the filling from top to bottom, most of them in very poor condition. While none of the pieces was of particularly good quality, a medium-sized basin with crude chinoiserie decoration in blue, is of some importance. The vessel (fig. 15, no. 1) is of a form that is extremely rare from the 17th century, but which clearly was the ornamental ancestor of the common washbasins of the 18th century. [21]

In marked, and even staggering contrast to the assemblage of cheap and utilitarian earthenware, was the presence of a massive lead-glass stem from a "ceremonial" drinking glass or candlestick, a form undoubtedly made in London in the period 1685–1695 (fig. 10). Although the double-quatrefoil stem units and central melon knop are paralleled by existing glasses, the heavily gadrooned foot is seemingly unknown. This last feature gives the foot such weight that it has led Mr. R. J. Charleston, Keeper of Ceramics at the Victoria and Albert Museum in London, to suggest that the stem may come from a candlestick (fig. 11) rather than from a large, covered glass. However, no parallels for such a candlestick are known.

One might be tempted to believe that a glass candlestick would be more likely to have been brought to 17th-century Virginia than would a seemingly pretentious, covered, "ceremonial" drinking-glass. But in 1732, Thomas Jones [22] of Williamsburg made a settlement upon his wife in case of his death, and among the possessions listed were "6 glass decanters, 6 glasses with covers . . . ." [23] Covered glasses ceased to be popular after about 1720 when fashions in glass were turning from the icy sparkle of mass towards more delicate and lighter designs. It is possible, therefore, that the Jones' glass might have been of the general type indicated by the Clay Bank stem. But be this as it may, there is no doubt that the excavated stem is the finest piece of glass of its period yet discovered in America, and that it is sufficiently important to be able to add a paragraph to the history of English glass.

Other glass objects included the powdered remains of a small quatrefoil-stemmed wineglass, a form common in the period 1680–1700.[24] Like so many glasses of its type, the metal was singularly impermanent when buried in the ground, and little or nothing could be salvaged of it. Also present were fragments of at least seven wine bottles of the short-necked, squat-bodied forms of the late 17th century, as well as one fragment of a short-necked and everted-mouthed case bottle. A few fragments of cylindrical pharmaceutical bottles were also found as was a well-preserved bottle of similar metal but in wine-bottle shape (fig. 9 and fig. 15, no. 19). Such bottles are thought to have been used for oils and essences, and their manufacture seems to have been confined to the period about 1680–1720.

Tobacco-pipe fragments (fig. 16) were plentiful throughout the cellar fill and provided a useful range of bowl forms as well as a key to the dating of the deposit. All the bowls were of types common in the last years of the 17th century, a period in which the two English bowl styles of the second half of the century (one evolving with a spur and the other with a heel) merged together into the single spurred form of the 18th century.[25] In addition, the Clay Bank cellar contained examples of bowls with neither heel nor spur, a style never popular in England, and which seems to have been developed specifically for the American market initially copying the shape favored by the Indians.

No fewer than 648 stem fragments were recovered from the cellar and their stem-hole diameters, using J. C. Harrington's chart,[26] indicated a manufacture date in the period 1680–1710. Because pipes are considered to have had a short life, it is generally assumed that the dates of manufacture and deposition are not far apart. Other artifacts from the

[21] *Rosewell*, fig. 26, nos. 1–4.

[22] Thomas Jones was the younger brother of Frederick Jones, whose James City County home site at Tutter's Neck was excavated in 1961. See Ivor Noël Hume, "Excavations at Tutter's Neck in James City County, Virginia, 1960–1961" (paper 53 in *Contributions from the Museum of History and Technology*; U.S. National Museum Bulletin 249; Washington: Smithsonian Institution), 1965, fig. 20, no. 8. Hereafter cited as *Tutter's Neck*. A fragment of a lead-glass gadrooned Romer of the same period as the Clay Bank stem was found on the Tutter's Neck site.

[23] Mary Stephenson, "Cocke-Jones Lots, Block 31" (MS., Research Dept., Colonial Williamsburg, Virginia, 1961), p. 6.

[24] *Tutter's Neck*, fig. 17, no. 17; also I. Noël Hume, "Some English Glass from Colonial Virginia," *Antiques* (July 1963), vol. 84 no. 1, p. 69, figs. 4 and 5.

[25] Ivor Noël Hume, *Here Lies Virginia* (New York: Knopf, 1963), fig. 105.

[26] J. C. Harrington, "Dating Stem Fragments of Seventeenth and Eighteenth Century Clay Tobacco Pipes," *Archeological Society of Virginia, Quarterly Bulletin* (September 1954), vol. 9, no. 1.

deposit, notably the large glass stem, the wine bottles, small wineglass and, of course, the pipe bowl shapes, together suggested a terminal date for the group within the period 1690–1700. Using the Binford formula,[27] the 648 stem fragments suggested a mean date of 1698. Experience has shown that the formula is likely to be accurate to three or four years either way on a sampling of that size.[28]

The presence of the same maker's initials, I·F, on pipe bowls at different levels of the cellar fill strongly pointed to a homogeneity of deposition. Although is is impossible to identify the owners of the initials with any certainty, it is worth noting that there was a Josiah Fox making pipes in Newcastle-under-Lyme in and after 1683 whose initials are the same as those most common in the Clay Bank cellar. The I·F mark was somewhat unusual in that it was impressed between two X's across the top of the stem (fig. 16, no. 11). All other marks, save one, were in the normal position, to left and right of the heels. These comprised W F (William Ferry, Marlborough, about 1700?), or perhaps W.P., H I (Henry Jones, London, 1688?)[29] and V R. The remaining mark, S A (fig. 16, no. 14) occurred on the bases of two bowls with neither heels nor spurs. From the oystershell layer south of the existing house came a bowl fragment ornamented with the name of a well-known Bristol pipemaking family, I TIPPET, in a raised cartouche on the side. This was probably Jacob Tippett whose name appeared in the Bristol Freedom Rolls in 1680.[30]

In addition to the few marked bowls, two stems were of interest in that they had been ground or pared down to enable the pipes to be used again, one being only 2¼ inches in length (fig. 16, nos. 12 and 13). Such frugality might be construed as being associated with a household of small means. Also present were a few brown stem fragments and part of one decorated bowl (fig. 8, no. 9) of Virginia, possibly Indian, manufacture.

[27] Mathematical formula based on Harrington's chart, prepared by Lewis H. Binford, University of Chicago. See LEWIS H. BINFORD, "A New Method of Calculating Dates from Kaolin Pipe Stem Samples," *Southeastern Archaeological Newsletter* (June 1962), vol. 9, no. 1, pp. 19–21.

[28] AUDREY NOËL HUME, "Clay Tobacco-Pipe Dating in the Light of Recent Excavations," *Archeological Society of Virginia, Quarterly Bulletin* (December 1963), pp. 22–25.

[29] ADRIAN OSWALD, "The Archaeology and Economic History of English Clay Tobacco Pipes," *Journal of the Archaeological Association* (London, 1960), ser. 3, vol. 23, pp. 40–102.

[30] ADRIAN OSWALD, "A Case of Transatlantic Deduction," *Antiques* (July 1959), pp. 59–61.

Conclusions

The importance of the Jenkins site cellar hole lies solely in its provision of a valuable group of closely dated artifacts. The excavations failed to reveal either the size of the building or any indication of its original ownership and purpose. The structure does not appear on any known map nor can it be equated with any specifications contained in the *Vestry Book* of Petsworth Parish or any other documentary source now available. Much local legend and speculation has been considered and regretfully rejected in the absence of any supporting evidence. The site does lie in the Second Precinct of Petsworth Parish and it has been established that the Porteus family did own land therein. Consequently it is quite possible that the Jenkins site was once part of that tract. But it does not necessarily follow that the cellar hole was part of the Edward Porteus family residence.

A *terminus post quem* of about 1700 for the filling of the cellar hole has been well established on the archeological evidence. The structure itself is represented by the large cellar hole which had been floored and walled with boards and vertical posts, and by the massive chimney at the east end. The absence of any abutting walling, coupled with our inability to find any traces of other foundations, strongly suggests that the building stood on piers or wooden blocks.

The artifacts include a number of extremely interesting objects; but the curious juxtaposition of the large glass stem (figs. 10 and 11) with crude earthenwares, wornout tools and broken and reused clay tobacco pipes makes it probable that the refuse was derived from different sources. Whereas the iron objects resting on the cellar floor may have been in the building when it was destroyed, it is clear that the large oystershell deposit (and therefore, the glass stem that it contained) must have been brought from elsewhere. It might therefore be deduced that the excavated structure had been a kitchen building or, perhaps, an overseer's house rather than the home of the owner of the glass stem.

The dearth of 18th-century colonial artifacts on the Jenkins property seems to indicate, at best, a less intensive occupation after the destruction of the building that overlay the excavated cellar hole. It seems improbable, therefore, that the existing "Ardudwy" was in existence before the late 18th century.

Illustrations

The objects illustrated in figures 8 through 16 are representative of the principal artifacts found in the Clay Bank excavations. The dating given below refers to the objects' period of manufacture; their terminal or throwaway date is determined by their archeological contexts, which are indicated by area and stratum designations. (See p. 11, Archeological Stratigraphy, and fig. 3.)

FIGURE 8

1. Marly fragment from small plate, English delftware, decorated in blue with chinoiserie design, probably of Chinamen, rocks, and grasses. The background color has a very pale-blue tint, unlike the pure whites and pinkish whites that are generally associated with London pieces of the period. The closest parallel for this sherd is in the Bristol City Museum in England [31] and is attributed to Brislington. An example of the style, attributed to Lambeth and dated 1684 is illustrated by F. H. Garner in his *English Delftware;* [32] but unlike the Clay Bank fragment, the central decoration does not reach to the marly. About 1680–1690. E4. (Fig. 15, no. 6.)
2. Handle fragment from chamberpot or posset pot, English delftware, decorated with irregular horizontal stripes in blue. The handle is pronouncedly concave in section, and lacking ornament on its edges (as usually occurs on posset pots)[33] a chamberpot identification seems most likely. The form ranges from the late 17th century at least through the first quarter of the 18th. E2.
3. Mug or jug, lower body and base fragment only, English delftware, white inside, with manganese stipple on exterior. Probably Southwark, first half of the 17th century. E4. (Fig. 15, no. 4).
4. Basin, English delftware, wall fragments only illustrated (for full reconstruction see fig. 15, no. 1), the glaze, pale blue, ornamented with central chinoiserie design of similar character to no. 1. The wall was decorated with narrow horizontal bands and a wide foliate zone below the everted rim. The bowl is important in that it is one of the earliest extant examples of the simple wash-basin form that was to become common throughout the 18th century. About 1680–1690. Illustrated sherds A3, C3, F2.
5. Basal fragment of plate, tin-glazed earthenware, decoration of uncertain form in two tones of blue outlined in black. Portuguese? 17th century. C4.
6. Base fragment from globular jug, English brown salt-glazed stoneware, probably from same vessel as no. 7. Late 17th or early 18th century. C3.
7. Neck fragment from bulbous mug or jug, decorated within multiple grooving,[34] ware and date as above. A3.
8. Tyg fragments, black lead-glazed, red-bodied earthenware (sometimes called Cistercian ware), the body decorated with multiple ribbing. (For reconstruction see fig. 15, no. 7.) Such drinking vessels were made with up to six or eight handles, but two was the most usual number and those were placed close together as indicated here. The form was prevalent in the period 1600–1675, though taller examples were common during the preceding century.[35] A3, C3.
9. Tobacco pipe bowl, pale-brown ware, burnished, and decorated with impressed crescents and rouletted lines, local Indian manufacture? [36] Second half of 17th century. E4.
10. Body fragment of cord-marked Indian cooking pot, Stony Creek type,[37] light red-tan surface flecked with ocher and with a localized grey core. Middle Woodland. B1.
11. Projectile point, buff quartzite, broad stem and sloping shoulders. Late archaic. E9.

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[31] W. J. Pountney, *Old Bristol Potteries* (Bristol, 1920), pl. 3 (lower left), and p. 37.

[32] F. H. Garner, *English Delftware* (London, 1948), pl. 26B.

[33] For a posset pot with these handle characteristics attributed to Brislington, 1706–1734, see W. M. Wright, *Catalogue of Bristol and West of England Delft Collection*, (Bath: Victoria Art Gallery, 1929), pl. 3.

[34] For shape parallel (but not body) see *Tutter's Neck*, fig. 18, no. 21.

[35] Barnard Rackham, *Mediaeval English Pottery* (London: 1948), pl. 94. Barnard Rackham, *Catalogue of the Glaisher Collection of Pottery and Porcelain* (Cambridge, 1935), no. 20, pl. 3A.

Griselda Lewis, *A Picture Book of English Pottery* (London, 1956), fig. 23.

[36] J. C. Harrington, "Tobacco Pipes from Jamestown," *Archeological Society of Virginia, Quarterly Bulletin* (Richmond: June 1951), fig. 4.

[37] I am indebted to Dr. B. C. McCary of the Archeological Society of Virginia for the identification of the prehistoric Indian artifacts. Clifford Evans, "A Ceramic Study of Virginia Archeology," (Bureau of American Ethnology Bulletin 160; Washington: Smithsonian Institution, 1955), p. 69.

Figure 8.—Fragments of English delftware, stoneware, earthenware, and Indian objects.

Figure 9.—Bottle of green glass in the form of a miniature wine bottle.

FIGURE 9

A small glass bottle in wine-bottle style but probably intended for oil or vinegar, and fashioned from a pale-green metal comparable to that used for pharmaceutical phials and flasks. The base has a pronounced conical kick, but is not appreciably thicker than the walls of the body. The mouth is slightly everted over a V-sectioned string rim. On the yardstick of wine-bottle evolution such a bottle is unlikely to have been manufactured prior to 1680 or later than about 1720. E5. (See also fig. 15, no. 19.)

FIGURES 10 AND 11

Stem and foot fragment from an elaborate drinking glass or candlestick. English lead metal of splendid quality. The solid stem is formed from two quatrefoil balusters between which is a melon knop with mereses above and below. The stem terminates in two mereses of increasing size and is attached to an elaborately gadrooned foot, only part of which survives. Any suggestion that the foot is actually part of the base of the bowl is negated by the presence of a rough pontil scar inside it, as well as by the fact that the surviving fragment spreads out at so shallow an angle that no other construction is possible.

Figure 10.—An elaborate stem of English glass, London, about 1685–1695.

The stem form is most closely paralleled by two goblets illustrated in W. A. Thorpe's *History of English and Irish Glass*,[38] one of which contains within its stem an English fourpenny piece of 1680. Because no known goblet exhibits the high, gadrooned foot of the Clay Bank example, it has been suggested that the stem may be that of a candlestick.[39] While this is certainly a reasonable supposition, it must be added that neither have examples of candlesticks been found in this form. (For conjectural reconstruction see fig. 11.) Although it is extremely unfortunate that no upper fragments were found, there is no doubt as to the date of the surviving section, nor is there any

[38] W. A. Thorpe, *A History of English and Irish Glass* (London, 1929), vol. 2, pl. 29 and 31, no. 2.

[39] See p. 13.

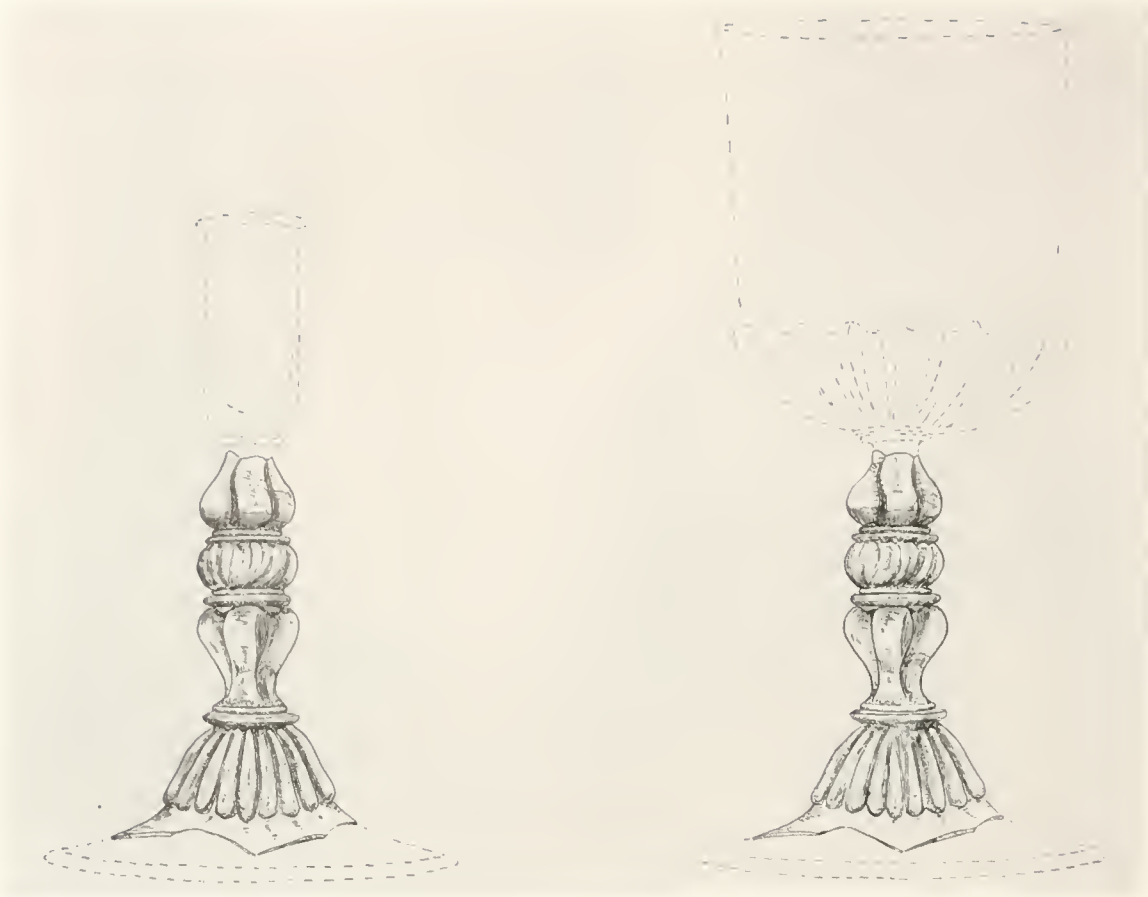

Figure 11.—The Clay Bank stem reconstructed as both a drinking glass and a candlestick. Height of fragment is 5¼ inches. About 1685–1695.

denying that it is on a par with the best English glass of its period. London, about 1685–1695. Height of fragment 5¼ inches. E4.

FIGURE 12

1. Spoon, latten, tinned, the bowl oval and the handle flat with a trilobed terminal. The back of the bowl possesses an extremely rudimentary rat-tail that is little more than a solid V slightly off-center at the junction of stem and bowl. The maker's mark inside the bowl bears the initials W W flanking a thistle, perhaps suggesting a Scots origin for the spoon. Last quarter of 17th century. E2.
2. Cutlery handle, bone, roughly round-sectioned at its junction with the iron shoulder but becoming triangular towards the top. A4.
3. Race knife, steel, a tool used by coopers and joiners to inscribe barrels and the ends of timbers. At one end is a tapering, round-sectioned tang to which a wooden handle was attached; beside this, and probably originally recessed into the wood, is a rectangular-sectioned arm, terminating in a small blade curved over at the end. The arm is hinged at the shoulder of the tool and could be folded back to inscribe large arcs and to be used as an individual cutting instrument. At the other end is a small blunt spike with spiral grooving and raised cordons, and a small fixed knife with a curved blade that could be used to cut in the opposite plain to that of the moveable arm. The arm is stamped with the maker's name WARD. Attempts to identify an English toolmaker of that name working in the second half of the 17th

Figure 12.—Latten spoon and other small finds.

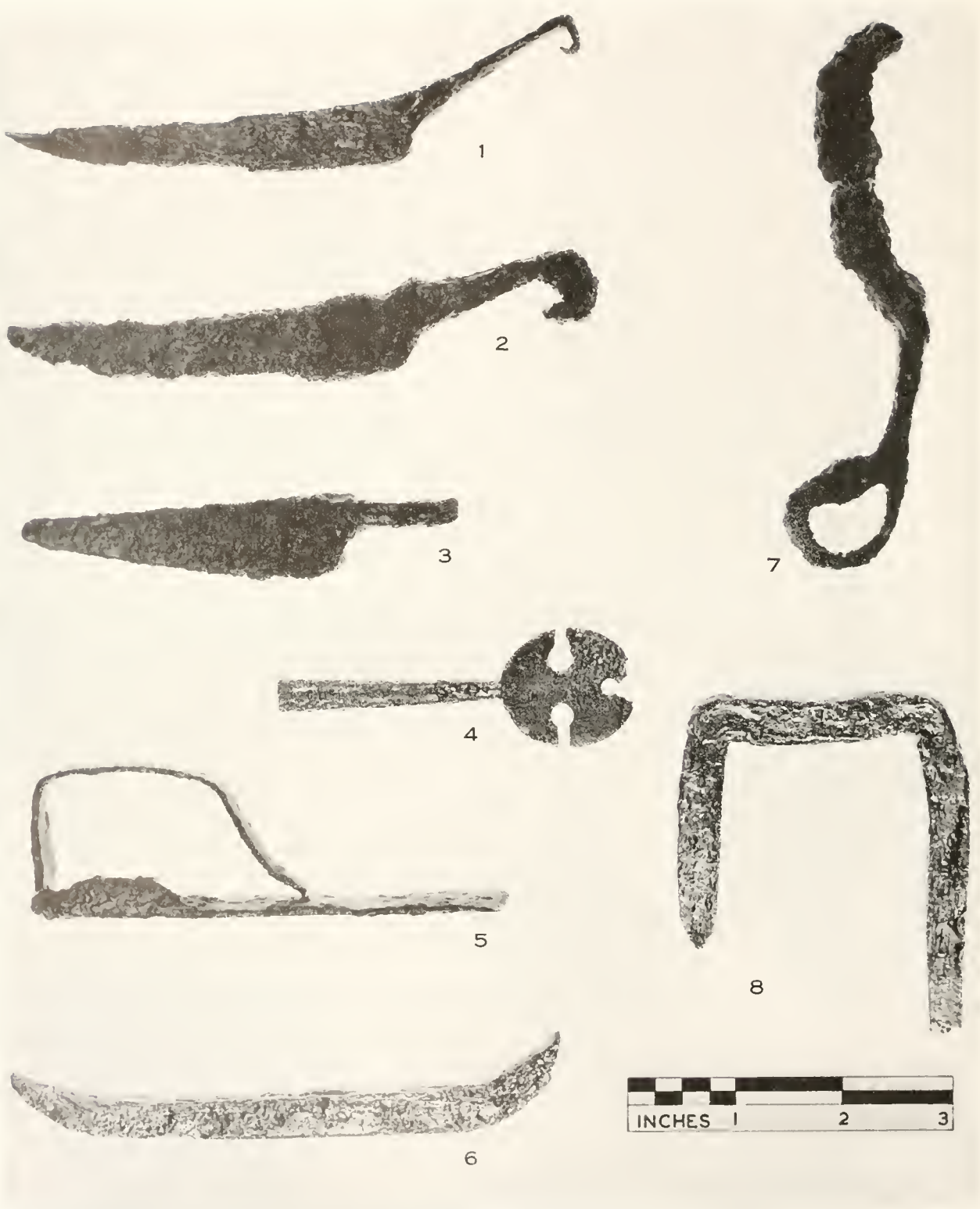

Figure 13.—Chelkpilce from bit, saw set, and other iron objects.

century have been unsuccessful. The tool is well made and possesses a surprising amount of decoration on the shoulders, in the shape of faceting at the corners and sculpturing of the flat surfaces.[40] E4. (See also fig. 15, no. 22.)

4. Gimlet, iron, the shaft drawn out at the top to grip the wooden handle, the spoon-shaped blade is badly distorted but the terminal worm still survives in part. B6A.
5. Tack, brass, probably from trunk or upholstery, convex head roughly trimmed, diameter ½ inch. C3.
6. Boss, cast brass, from cheekpiece of bridle; the slightly dished edge and central nipple appear to have been ornamental devices more popular in the 17th than in the 18th century.[41] This object overlay the robbed rear-chimney foundation at its northeast corner. B2.
7. Strainer fragment, brass or bronze; the edge flat and therefore not part of a colander, probably originally attached to an iron handle. Diameter approximately 8½ inches. E2.

FIGURE 13

1. Object of uncertain purpose, iron, the pointed "blade" without cutting edge and ⅛ inch in thickness, the tang drawn out, rectangular in section and clenched at the end. A2.
2. Object similar to the above,[42] but heavier, the tang wider than the thickness of the "blade," ⅜ inch and 3/16 inch respectively. E4.
3. Knife blade, iron, small flaring shoulders and round-sectioned tang. The blade is of unusual shape and may have been honed down to its present size. C4.
4. Saw wrest or saw set, iron, used to grip and bend the teeth of saws sideways to enlarge the width of the cut and thus prevent the blade from binding.[43] C2.
5. Object of uncertain purpose, iron, comprising a flat strip ⅝ inch in width at one end and tapering to 9/16 inch at the other which exhibits a small right-angled flange before turning upwards and back on itself, narrowing to a thinner strip measuring 5/16 inch in width, and forming a loop. The base strip has a small notch at its broad end.[44] C3.
6. Cramp(?), iron, perhaps intended to be set in mortar and used to join masonry; rectangular in section and drawn down almost to a point at either end. E4.
7. Cheekpiece from snaffle bit, iron, incomplete, angular knee with hole for linking element between rein and bit. This is a 17th-century characteristic common at Jamestown[45] but rare among the many bits from Williamsburg. E2.
8. Staple, iron, both points broken and the back somewhat bowed, probably as a result of having been driven. C3.

FIGURE 14

1. Eye of hoe, iron, possibly a grub hoe similar to no. 2, in an advanced state of decay with the blade represented only by the narrow triangular spine; no trace of a maker's mark. C3.
2. Grub hoe, iron, the eye and part of the blade surviving, the spine thick and narrow, no maker's mark. The form has no published parallel either from Jamestown or Williamsburg. An example with similar shoulders, but with a V-shaped blade edge, was found on the Challis pottery kiln site in James City County in a context of about 1730. [C.S.21F; unpublished.] E4.
3. Broad hoe, iron, with eye and part of the originally D-shaped blade surviving; the spine shallow, short and flat, with clearly impressed maker's initials I H within an oval. Circular and oval marks are common in the 17th century but are rare in the 18th.[46] E4.

[40] Henry C. Mercer, "Ancient Carpenters' Tools," *Bucks County Historical Society* (Doylestown, Pa., 1951), p. 51 and fig. 49. John L. Cotter, "Archeological Excavations at Jamestown, Virginia," *U.S. National Park Service Archeological Research Series*, no. 4 (Washington, 1958), p. 174, pl. 72 top.

[41] Cotter, no. 1, p. 176, pl. 74 top.

[42] These objects are extremely common on 18th-century sites. *Rosewell*, p. 224, and fig. 36, no. 8. *Tutter's Neck*, fig. 16, no. 12.

[43] Mercer op. cit., p. 295ff.

[44] Two larger examples were found in a cache of metal objects deposited in about 1730 and found on the Challis pottery kiln site in James City County. Two more were encountered in excavations on the Hugh Orr house and blacksmith shop site on Duke of Gloucester Street in Williamsburg where they apparently dated from the mid-18th century.

[45] Carl Gustkey, "Sir Francis Wyatt's Horse," *The National Horseman* (April 1953), [no pagination] fig. 2.

[46] The majority of marked 18th-century hoes excavated in Virginia exhibit rectangular stamps, while postcolonial marks tend to be stamped on the blades rather than the raised spines and without any die edge being impressed.

4. Hoe blade, iron, from which the eye and spine appear to have been removed. It cannot be ascertained whether the blade is part of a cut-down broad hoe or whether it was always roughly square in form. The latter shape was well represented in a cache of agricultural tools of uncertain date found in excavations at Green Spring in James City County.[47] E4.
5. Stirrup, iron, rectangular footplate with its surface hammered to increase the grip, the sides round-sectioned but flattened towards the leather-loop which is drawn out into ornamental ears. The style was common in the late 17th century. E4.
6. Forming chisel, iron, socketed for attachment to a wooden handle, the socket and shaft square-sectioned, the blade $2\frac{1}{4}$ inches wide and the cutting edge improved by a welded plate of superior metal extending $1\frac{7}{8}$ inches up the blade. Found behind a wallboard at floor level. B6A.
7. Cooper's chisel, iron, the blade $1\frac{3}{4}$ inches in width and with a groove running the length of the $\frac{1}{8}$-inch broad edge to grip the edge of the hoop while hammering it into place. The shaft is round-sectioned and spreads into a flat mushroom head. C4.
8. Wedge, iron, of large size, rectangular head measuring $2\frac{3}{8}$ inches by $1\frac{7}{8}$ inches, length $7\frac{3}{8}$ inches and weight 4 pounds. The head shows no evidence of heavy usage and consequently there is no clue as to why such an object should have been thrown away. A close parallel ($7\frac{1}{4}$ inches in length) was found at Ste Marie I in Canada on the site of the early Jesuit settlement of 1639–1649.[48] B3A.
9. Spade, iron edge from wooden blade, the upper edge of the metal split and the extended sides possessing small winglike projections, and nails at the ends which together served to attach the iron to the wood. Iron edges for wooden spades are not included in the artifact collections from 18th-century Williamsburg, but were plentiful in various sizes in mid-17th-century contexts at Mathews Manor in Warwick County. [Unpublished.] C3.
10. Projectile, solid iron, cast in a two-piece mold, diameter $2\frac{3}{4}$ inches, weight 3 pounds 1 ounce. This is possibly a ball from a minion[49] whose shot weight is given in Chambers' *Cyclopaedia* (1738) as 3 pounds 4 ounces, the difference possibly being occasioned by the Clay Bank specimen's decayed surface. D3.

FIGURE 15

1. Basin, English delftware, reconstruction on basis of rim, body and base fragments, about 1680–1690. (Fig. 8, no. 4) A3, B1, B3, C3, C4, E2, F2, H3.
2. Basin as above, lower body fragments.
3. Basin as above, base fragment.
4. Mug or jug, lower body fragment, manganese stippled. First half of 17th century(?). (Fig. 8, no. 3.) E4.
5. Plate, English delftware, rim and base fragments (also section), decoration in two tones of blue, the fronds outlined in black. London(?). About 1670–1700. A3, E3.
6. Plate, English delftware, about 1680–1690. (Fig. 8, no. 1.) E4.
7. Tyg, black lead-glazed red ware, double handled; height conjectural. 17th century. (Fig. 8, no. 8.) A3, B3, B6A, C3, C4, E3, E9, F3, G2, G3A, H3, 10.
8. Tyg, rim sherd only, brown lead-glazed red ware, thinner than no. 7 and its ribbing not extending as close to the mouth; diameter approximately $4\frac{1}{2}$ inches, 17th century. B1.
9. Mug, black lead-glazed red ware, thin-walled bulbous body; handle conjectural. The form's closest published parallel is a red ware example which was exhibited at the Burlington Fine Arts Club, London, in 1914, and bore the legend MR. THOMAS FENTON in white slip below the rim. The piece was identified as Staffordshire, about 1670.[50] A comparable mug was found in 1964 in excavations at Mathews Manor in Warwick County in a context of the second quarter of the 17th century. [W.S.199; unpublished.] A3, G3A, H3.
10. Rim sherd from large pan, red body liberally flecked with ocher, thin lead glaze, the rim folded

[47] Louis R. Caywood, "Green Spring Plantation," *Archeological Report*, Virginia 350th Anniversary Commission (Yorktown: United States National Park Service, 1955), pl. 9 (bottom).

Kenneth E. Kidd, *The Excavation of Ste Marie I* (Toronto: University of Toronto Press, 1949), p. 108 and pl. 24b.

[49] See p. 12 for a consideration of the ball's possible significance.

[50] *Catalogue of Exhibition of Early English Earthenware*, Burlington Fine Arts Club (London, 1914), p. 29 and fig. 41.

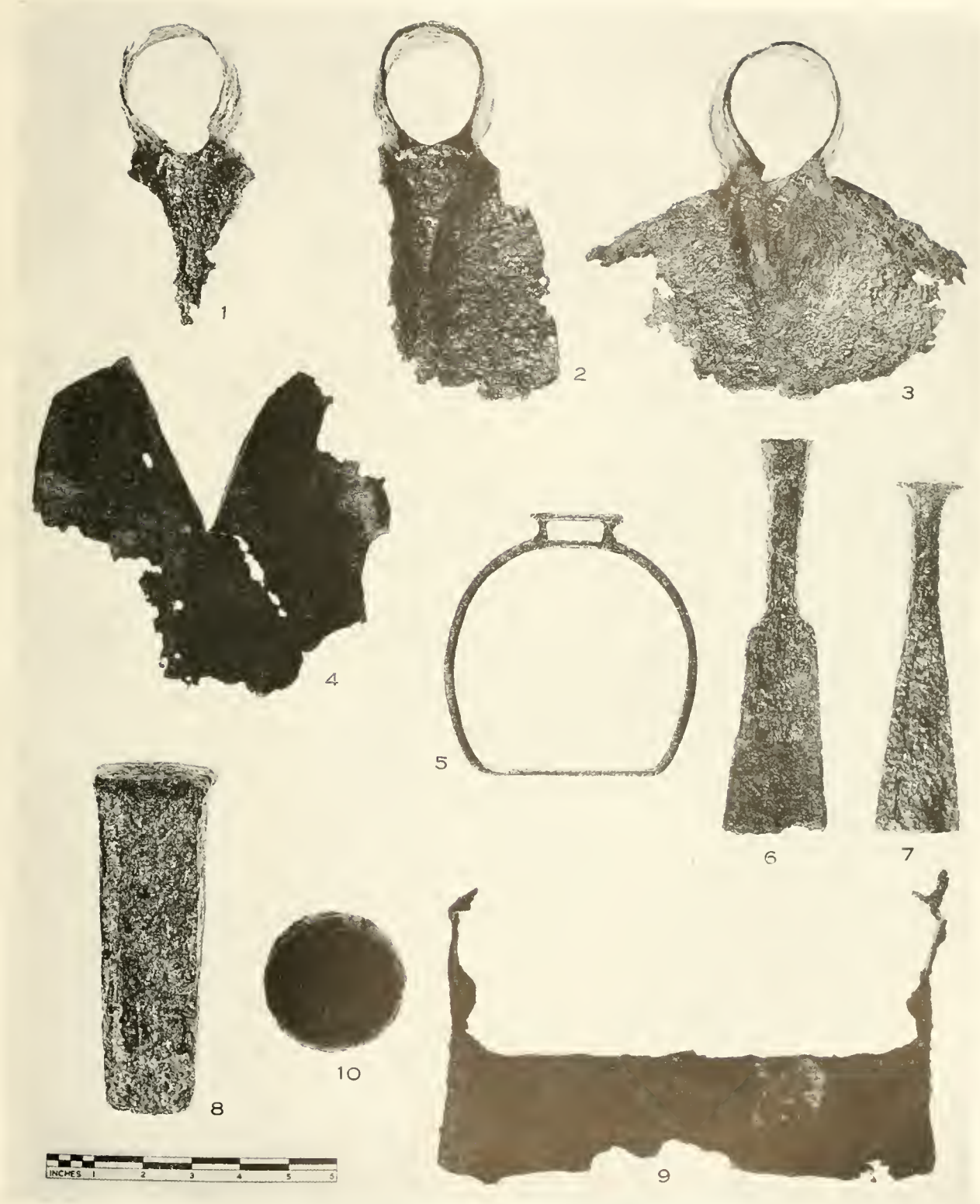

Figure 14.—Iron tools, stirrup, and cannon ball.

Figure 15.—Drawings of pottery, glass, and metal objects.

and flattened on the upper edge. This fragment is of importance in that it is almost certainly made from the local Tidewater Virginia clay, yet the rim technique has not been found on any of the pottery kiln sites so far located. Date uncertain. K11.

11. Rim sherd from pan or wide bowl, red ware with greenish-brown lead glaze, the rim thickened and undercut. This form, and variants on it, were common from the mid-17th century and on through the 18th, and they are therefore impossible to date on stylistic grounds alone. Probably English. C4.
12. Rim sherd from large shallow pan, red ware with yellowish-green lead glaze; the rim thickened, folded and undercut, the upper surface flattened and with a pronounced ridge at its angle with the bowl; diameter approximately 1 foot 6 inches. Dating considerations as no. 11. Probably English. E4.
13. Rim sherd from storage jar, red ware with brown lead glaze, the rim thickened, folded, and flattened on the top; diameter approximately 10½ inches. The form was common from about 1650 to 1750. Probably English. E2.
14. Storage jar or pipkin, pale-pink ware flecked with ocher and occasional granules of quartz, a clear lead glaze imparts an orange color to the surface, and is locally streaked with green. The rim is heart-shaped in section, having a groove along its upper surface, and the body is extremely finely potted. There is good reason to suppose that this vessel is of Virginia manufacture, in which case the 17th-century colony possessed a potter of greater ability than any of those whose kilns have yet been found. Another fragment of this pot, or one identical to it, was found to the southeast of the existing house. C4, E4, 10, K11.
15. Rim sherd from wide bowl of Colono-Indian[51] pottery, grey shell-tempered ware with stick- or pebble-burnished reduced surface, the rim everted and flattened. The ware is contemporary with the European artifacts from the site and is the earliest datable fragment yet recovered. A3.
16. Rim sherd from bowl of Colono-Indian pottery, buff shell-tempered ware with stick- or pebble-burnished oxidized surface, the rim everted, flattened and very slightly dished. K11.
17. Wine bottle, olive-green glass in an advanced state of decay, the neck short and broad and the mouth slightly everted over a roughly applied string rim, the body squat and slightly broader at the shoulder than at the base, a domed basal kick and no obvious pontil scar. This is a composite drawing illustrating the shape typical of the bottles from the Clay Bank site cellar hole. The two fragments cannot be proved to be part of the same bottle. About 1680–1700. Neck A2. Body F3.
18. Wine bottle, half-bottle size, olive-green glass in an advanced state of decay, the form similar to the above but slightly weaker in the shoulder. About 1680–1700. C4.
19. Bottle, in form of miniature wine bottle, the glass a pale green similar to that used in the making of pharmaceutical phials. (Fig. 9.) About 1680–1720. C4.
20. Base of pharmaceutical bottle, pale-green glass with pronounced conical kick and rough pontil scar, the metal very thin. The principal dating characteristics of these bottles are the shapes of the mouths and the slope of the shoulders; in the absence of those, no close dating is possible.[52] C4.
21. Ring, iron, round section, considerable evidence of wear at one point on the inside edge suggesting that this object had been attached to a link of chain or perhaps has been held by a staple or eye. Such rings are frequently to be found attached to stalls in stables. B6A.
22. Race knife, the dashed outline indicating the angle of the hinged blade in its open position. (See fig. 12, no. 3.) E4.
23. Object of uncertain purpose, iron, slightly convex on the upper face, flat behind, and with a small, flat tongue projecting from the rear. A much rusted lump adhering to the front may conceal a similar projection or it may have simply attached itself in the ground. C3.
24. Collar, iron, four unevenly spaced nail holes for attachment to a wooden shaft having an approximate diameter of 3½ inches. D6A.
25. Object of uncertain purpose, iron, rectangular-sectioned bar narrowing to a small blade-like ear at one end and flattened into the opposite

[51] Ivor Noël Hume, "An Indian Ware of the Colonial Period," *Archeological Society of Virginia, Quarterly Bulletin* (September 1962), vol. 17, no. 1, p. 5.

[52] Ivor Noël Hume, "A Century of London Glass Bottles, 1580–1680," *The Connoisseur Year Book* (London, 1956), p. 102, fig. 14 right.

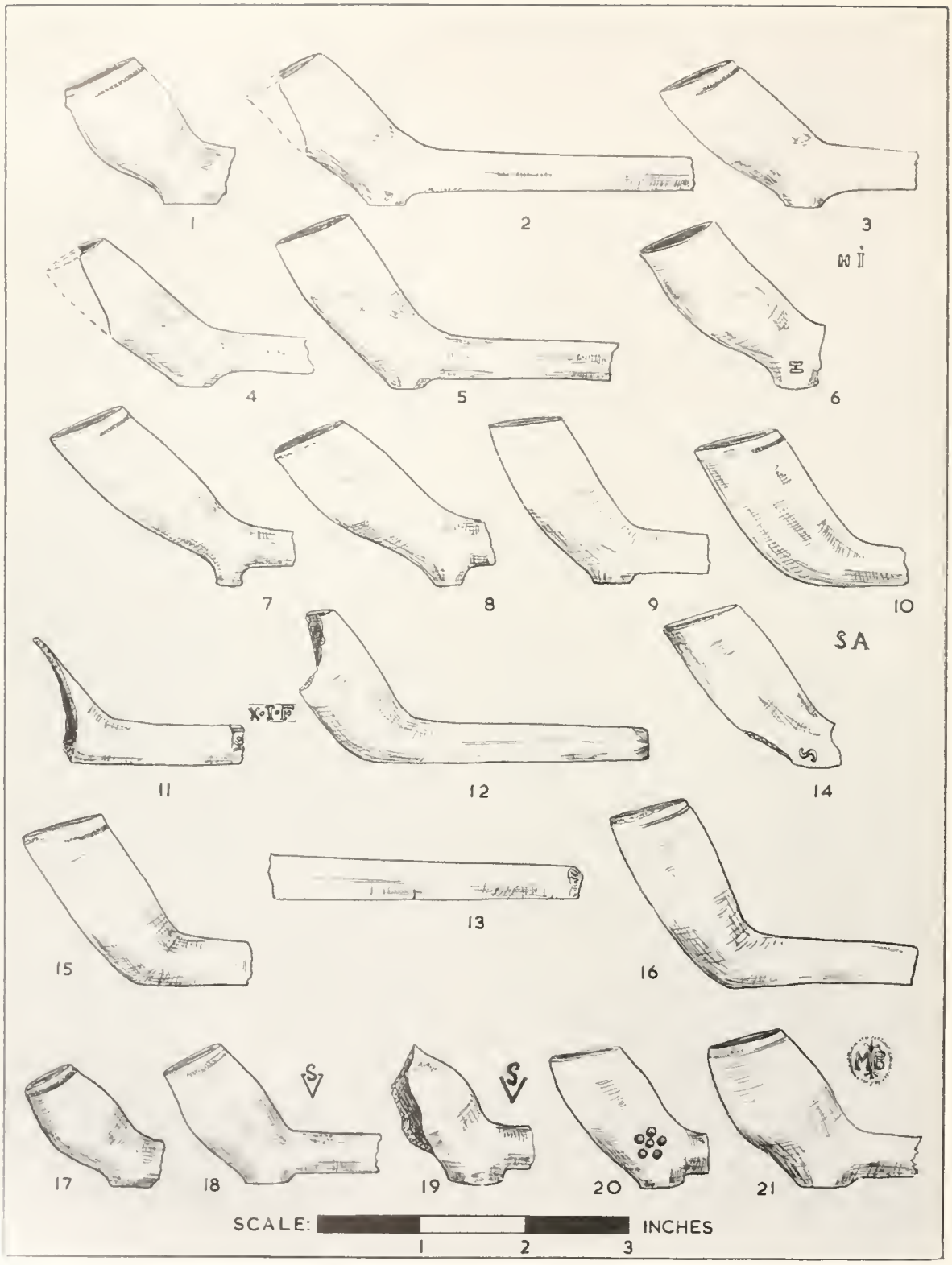

Figure 16. Drawings of tobacco-pipe bowl shapes from Clay Bank and Aberdeen Creek.

plain at the other, apparently for attachment. E4.

26. Staple or light handle for a small box, the narrow ends perhaps originally clenched and since broken. C3.
27. Handle of spoon, pewter, a heart-shaped terminal above two small lobes, the letter M stamped with a well-cut die close to the edge, and a roughly incised cross below it. A late 17th-century terminal form. K11.

FIGURE 16

1. Tobacco-pipe bowl, clay, white surface and grey core, the bowl heavy and bulbous, large flat heel, rouletted line below the mouth, stem-hole diameter $\frac{7}{64}$ inch. (See no. 19 for possible parallel.) About 1650–1690. E7.
2. Tobacco-pipe bowl and incomplete stem, clay, white surface and grey core, cylindrical bowl form with shallow heel extending from the fore edge of the bowl, initials V R on either side of heel, stem-hole diameter $\frac{6}{64}$ inch. About 1680–1700. E4. Another example from B6A.
3. Tobacco-pipe bowl, clay, white surface and grey core, form similar to No. 2, but the heel slightly more pronounced and with rouletted line below the mouth, stem-hole diameter $\frac{6}{64}$ inch. About 1680–1700. A3.
4. Tobacco-pipe bowl, white clay, form similar to no. 2, but more slender and the heel smaller, stem-hole diameter $\frac{6}{64}$ inch. About 1675–1700. E7.
5. Tobacco-pipe bowl, white clay, evolved form of no. 2, the bowl at a more pronounced angle to the stem, stem-hole diameter $\frac{6}{64}$ inch. About 1690–1720. A3.
6. Tobacco-pipe bowl, white clay, the bowl shape a cross between no. 2 and the more elegant and slender style of no. 7, pronounced and somewhat spreading heel with maker's initials H I on either side, stem-hole diameter $\frac{6}{64}$ inch. About 1670–1700. A3.
7. Tobacco-pipe bowl, clay, white surface and grey core, narrow "swan-neck" form with small heel that is almost a spur, rouletted line below the mouth, stem-hole diameter $\frac{7}{64}$ inch, about 1680–1700. E4.

   Another example (not illustrated) bears the maker's initials WP (or R) on the sides of the heel,[53] stem-hole diameter $\frac{6}{64}$ inch. A3.
8. Tobacco-pipe bowl, white clay, form similar to no. 7 except that the bowl is not quite as long and the fore edge of the heel is less pronounced. stem-hole diameter $\frac{6}{64}$ inch, about 1680–1700. A3.
9. Tobacco-pipe bowl, white clay, the bowl broader and at a sharper angle to the stem than in the preceding examples, the heel shallow and its fore edge extending from the bowl as in nos. 2 5, stem-hole diameter $\frac{6}{64}$ inch, about 1690–1720. A3. This example is significant in that it represents the evolutionary merging of the cylindrical and bulbous bowl forms, with their varying heels and spurs, into a single bowl shape that persisted through the 18th century. It should be noted that the illustrated bowl retains the thin-walled circular mouth common to most examples of its period. The mouth often becomes more oval and the walls thicker in specimens dating later into the 18th century.
10. Tobacco-pipe bowl, white clay, more or less cylindrical rouletted line below the mouth, and with neither heel nor spur. The absence of these last features is thought to have been dictated by English pipemakers catering for the American Indian market and initially copying aboriginal forms. Stem-hole diameter $\frac{7}{64}$ inch, about 1680–1700. H3.
11. Fragment of tobacco-pipe bowl and stem, clay, white surface and pink core to bowl, but burnt white through stem; bowl shape apparently similar to no. 10, stamped initials across top of stem at the fracture, I F flanked on either side by a period and a cross,[54] stem-hole diameter $\frac{6}{64}$ inch. E4.
12. Tobacco-pipe bowl and stem fragment, white clay, the form very similar to no. 10 but without rouletting below the mouth. The pipe is of interest in that the stem fracture has been pared

[53] A William Partridge was named in the Bristol Freedom Roll for 1689, cf. OSWALD, op. cit. (footnote 30), p. 88.

[54] *Ibid.*, p. 70. Perhaps Jacob Fox, Bristol Freedom Roll for 1688, or John Fletcher, Chester Freedom Roll 1673, or Josiah Fox of Newcastle-under-Lyme who was working in 1684. Other examples with this mark occur in groups A3 and A4, also on the Harwood property (surface find) close to the north bank of Aberdeen (Clay Bank) Creek. See p. 14. A single unstratified example has been found in Williamsburg, coming from disturbed topsoil behind Capt. Orr's Dwelling on Duke of Gloucester Street.

down after breaking to create a new mouthpiece and a stem only approximately 2¼ inches in length. Stem-hole diameter 7/64 inch, about 1680–1700. C4.

13. Tobacco-pipe stem fragment, white clay, broken off at junction with bowl and pared down at the other end as no. 12 thus creating a 3-inch stem. Hole diameter 6/64 inch, date indeterminate. B6A.
14. Tobacco-pipe bowl, white clay, bowl shape similar to no. 2 but without heel; maker's initials on the base of the bowl, almost certainly SA though the companion initial has been lost from the other side.[55] Stem-hole diameter 6/64 inch, about 1680–1700. C4.
15. Tobacco-pipe bowl, clay, white surface and grey core, slightly more evolved than no. 10 being more sharply angled at its junction with the stem as well as being slightly longer and narrower in the bowl. Note that this pipe still possesses the rouletted line below the mouth that tends to be characteristic of 17th-century examples. Stem-hole diameter 5/64 inch, about 1690–1710. A3.
16. Tobacco-pipe bowl, clay, white surface and grey core, essentially similar to no. 15, but longer in the bowl and even more angled at its junction with the stem. Stem-hole diameter 6/64 inch, about 1690–1710. B3A.

(Nos. 17–21 are surface finds from an as yet unexcavated site on farmland owned by Miss Elizabeth Harwood, approximately a mile and a quarter south of Clay Bank, and north of Aberdeen Creek. They are included here as examples of earlier 17th-century occupation in the Clay Bank area, and because one of the stem fragments from this site bears the same X·I·F·X mark as appears on five examples (no. 11) from the Jenkins site cellar hole.)

17. Tobacco-pipe bowl, white clay, flat broad heel, the bowl somewhat bulbous in the mid section, neat rouletted line below the mouth. Stem-hole diameter 7/64 inch, about 1630–1670.
18. Tobacco-pipe bowl, white clay with slipped surface, the bowl shape characteristic of the mid-17th century, flat heel, and roughly applied rouletted line below the mouth; maker's mark $\overset{S}{V}$ stamped on upper surface of stem. Stem-hole diameter 7/64 inch, about 1650–1690.
19. Tobacco-pipe bowl, fragment only, clay, white surface and grey core, the bowl extremely bulbous and with a pronounced flat heel. Maker's mark $\overset{S}{V}$ stamped on the upper surface of the stem; dies different to those used for no. 18, but undoubtedly the same maker. This is important in that it illustrates the wide difference in bowl shapes produced, apparently contemporaneously, by a single maker. Stem-hole diameter 7/64 inch, about 1650–1690.
20. Tobacco-pipe bowl, white clay, the bowl and early form of no. 3 ornamented on the sides with six molded dots in high relief,[56] the heel similar to no. 17 though slightly deeper. Stem-hole diameter 8/64 inch, about 1640–1670.
21. Tobacco-pipe bowl, white clay with slipped surface, heavy bulbous bowl and flat heel with the maker's mark M B on the base; a narrow rouletted line around the bowl mouth. Stem-hole diameter 7/64 inch, about 1650–1680.

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[55] Oswald lists no maker with these initials in the appropriate period. However, a bowl impressed on the back with the initials S A over the date 1683 was found in the river Thames at Queenhithe (London) and is in the author's collection. See also D. R. Atkinson, "Makers' Marks on Clay Tobacco Pipes Found in London," *Archaeological News Letter* (London, April 1962), vol. 7, no. 8. p. 184; no. 24; and fig. 2, no. 24. See also *Rosewell*, p. 221 (footnote 96).

[56] A pipe with similar ornament is in the author's collection of examples from the river Thames at London.

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Paper 53

Excavations at Tutter's Neck in James City County, Virginia, 1960–1961

Ivor Noël Hume

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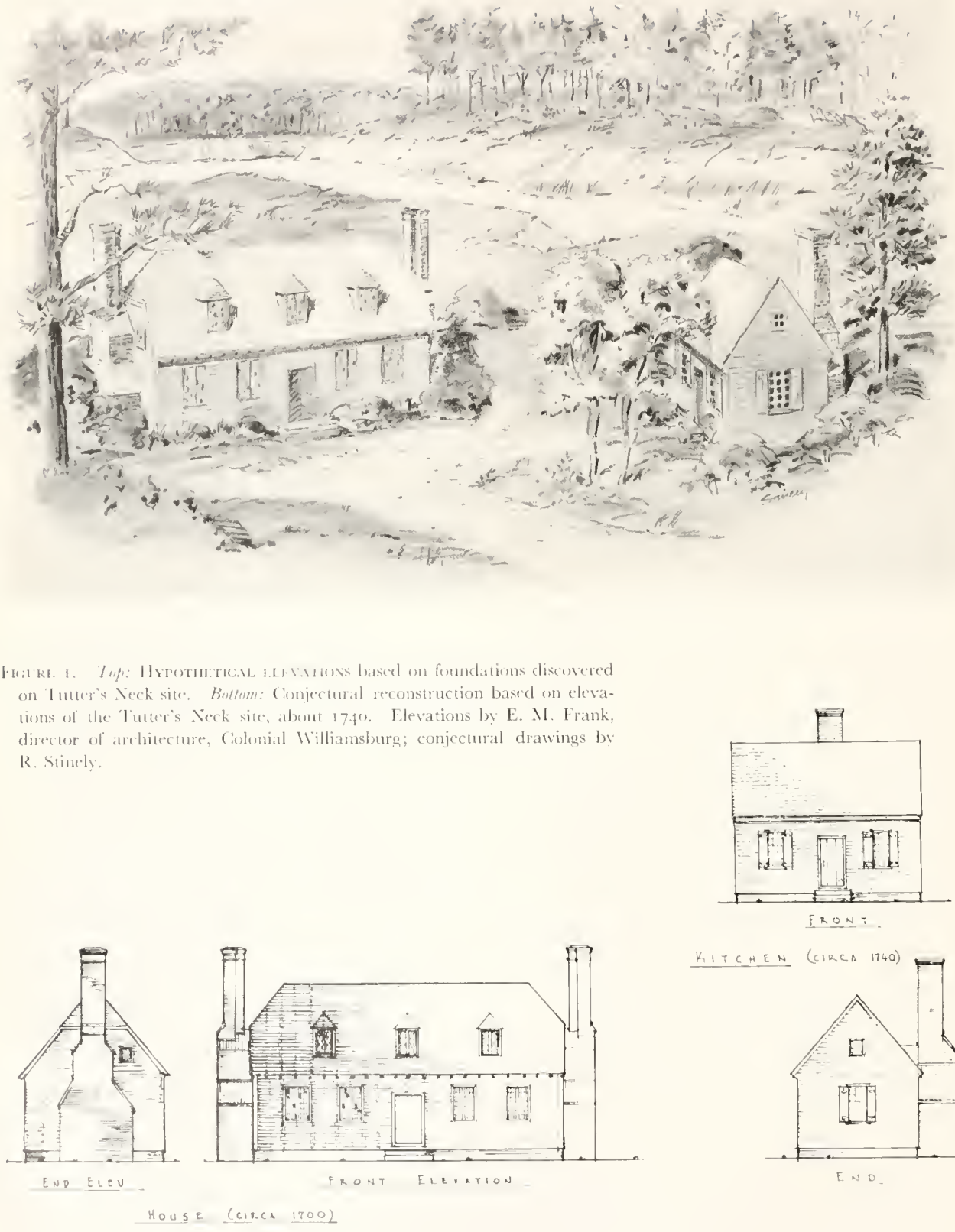

FIGURE 1. *Top:* HYPOTHETICAL ELEVATIONS based on foundations discovered on Tutter's Neck site. *Bottom:* Conjectural reconstruction based on elevations of the Tutter's Neck site, about 1740. Elevations by E. M. Frank, director of architecture, Colonial Williamsburg; conjectural drawings by R. Stinely.

Ivor Noël Hume

Excavations at TUTTER'S NECK in James City County, Virginia, 1960-1961

Land clearance for reforestation of property leased from Williamsburg Restoration, Inc., resulted in the exposure of numerous fragments of early 18th-century pottery and glass. Partial excavation of the site, known as Tutter's Neck, revealed foundations of a small colonial dwelling and outbuilding, both of which had ceased to exist by about 1750.

This paper describes and analyzes the artifacts recovered from refuse pits on the site. These artifacts, which have been given to the Smithsonian Institution, are closely dated by context and are valuable in the general study of domestic life in early 18th-century Virginia.

THE AUTHOR: *Ivor Noël Hume is director of the department of archeology at Colonial Williamsburg and an honorary research associate of the Smithsonian Institution.*

IN THE SUMMER of 1959 the Chesapeake Corporation undertook land-clearance operations prior to reforestation on property leased from Williamsburg Restoration, Inc., lying to the east of College Creek, which runs into the James River below Jamestown Island (see fig. 2). In the course of this work the foundations of a small and hitherto unrecorded colonial residence were bulldozed and largely destroyed. In the spring of 1960, Mr. Alden Eaton, director of landscape construction and maintenance for Colonial Williamsburg, while walking over the razed area, picked up numerous fragments of early 18th-century pottery and glass which he later brought to the writer for identification. As the result of this

find a survey of the site was undertaken, and two colonial foundations were located and partially excavated.[1]

The area available for study was limited by the need to cause as little disturbance as possible to the newly planted seedlings, by a shortage of time and labor, and by the remarkable speed with which the ground became overgrown with locust trees and infested by mayflies and mosquitoes. The location of the excavation area, nearly a mile from the nearest road, and off a track pitted with mud-filled depressions, made access impossible during most of the winter months; consequently, work was possible only in the spring and fall of 1960. By the summer of 1961 both the approach and the site itself had become completely overgrown.

Regardless of these limitations it was possible to obtain full details of the surviving remains of both the dwelling and its associated kitchen, as well as recovering a number of informative groups of domestic artifacts from trash pits under and around the latter structure. Fortunately, the presence of seal-adorned wine bottles in two pits provided data that led to the identification of one of the owners of the property, and thence to a reconstruction of the history of the site in general.

It should be noted that whereas the colonial artifacts that have been excavated from Marlborough and Rosewell provide a useful range of household items of the middle and third quarters of the 18th century, respectively, the Tutter's Neck material belongs only to the first 40 years of that century, with the emphasis largely upon the first decade. This last is a phase of Tidewater archeology about which little is known, falling as it does after the end of the Jamestown era and at the beginning of the Williamsburg period. Although, of course, Williamsburg was already being built at the turn of the century, so intensive was the occupation in the following 75 years that few archeological deposits of the city's early days have remained undisturbed. The fact that the Tutter's Neck site was abandoned before 1750, and never again occupied, consequently enhances its archeological importance.

Location of the Site

The site lies on a steeply sloping promontory at the junction of Kingsmill and Tutter's Neck Creeks, which flow as Halfway Creek into College Creek approximately 1,050 yards to the west. The house stood on the crown of the slope facing west, some 260 yards from the junction of the creeks, and thus possessed a commanding position. Perhaps, at that time, there was a clear view of all vessels passing up College Creek—the main waterway to Williamsburg from the James River. As the crow flew, the house stood approximately three miles from Williamsburg, but by road the route was close to four miles to the eastern edge of the town.

While the largest ships generally unloaded their cargoes at landings on the James, the smaller vessels would often carry their cargoes up College Creek to College Landing, about a mile and a quarter from Williamsburg. It seems reasonable to suppose that Halfway Creek was also navigable for these vessels on the high tide. In view of the fact that the curve of the creek's main stream today touches the southern edge of Tutter's Neck, it is likely that a landing existed there in the 18th century. However, no traces of such a landing are now visible.

History of the Site

There was no known record of the existence of the houses when the Chesapeake Corporation stripped the site in 1959. The only colonial map of the area, the so-called Desandrouin map of 1781 (fig. 4), shows the neck covered by thick woodland, but indicates two or more buildings some distance to the

---

[1] I am indebted to Colonial Williamsburg, Inc., for permitting the partial excavation of the site, for its generosity in offering to present the bulk of the artifact collection to the United States National Museum, and for its financial assistance in the preparation of this report. I am also much indebted to Audrey Noël Hume and John Dunton who represented the full extent of our field team, and to the latter for his work in the preservation of the iron and other small finds. My gratitude is also extended to A. E. Kendrew, senior vice president of Colonial Williamsburg, and to E. M. Frank, resident architect, the late S. P. Moorehead, architectural consultant, and Paul Buchanan, all of Colonial Williamsburg, for their help in the interpretation of the architectural remains. Further thanks are extended to Thaddeus Tate of the College of William and Mary for his valued council throughout the operation and for reading and commenting on the final report. I also greatly appreciate comments made by C. Malcolm Watkins, curator of cultural history at the Smithsonian Institution, in regard to the European artifacts; the help with the Indian material provided by Ben C. McCary, president of the Archeological Society of Virginia; and suggestions for historical sources made by H. G. [illegible], archivist, North Carolina. Finally, my thanks are [illegible] Alden Eaton who first found the site and without whose [illegible] another relic of Virginia's colonial past would have [illegible] lost.

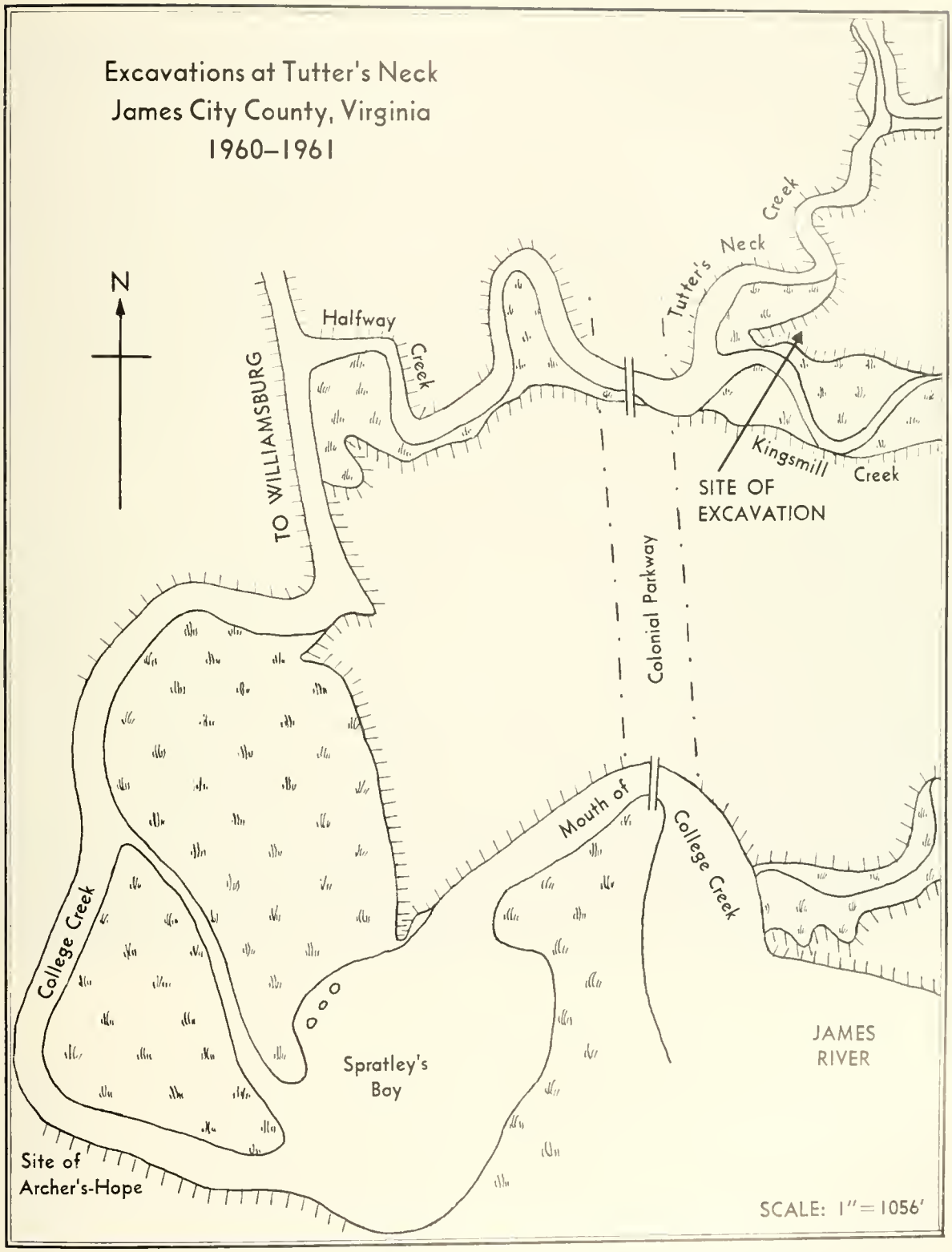

FIGURE 2.—THE TUTTER'S NECK SITE in relation to College Creek and the James River.

FIGURE 3. AERIAL PHOTOGRAPH of Tutter's Neck taken soon after bulldozing and before the Jones site (arrow) was found. Photo courtesy City of Williamsburg.

east. These sites also lay within the bulldozed area, but, paradoxically, no traces of these have been found. Comparison of the Desandrouin map with the aerial photograph (fig. 3) will show that a small, marsh-flanked stream flowed across the back of the Neck in the 18th century and emptied into Kingsmill Creek. This stream has since silted up and has cut a new channel that causes it to open into Tutter's Neck Creek to the north of the house site.

The Desandrouin map suggests that the buildings on Tutter's Neck had ceased to exist by 1781, and this conjecture is supported by the artifacts from the site, none of which date later than mid-century. Considerable difficulty in establishing the lifespan of the house and outbuilding has resulted in part from the fact that any evidence for a terminus ante quem had been stripped away by the bulldozing and in part from the absence of any maps that identify this

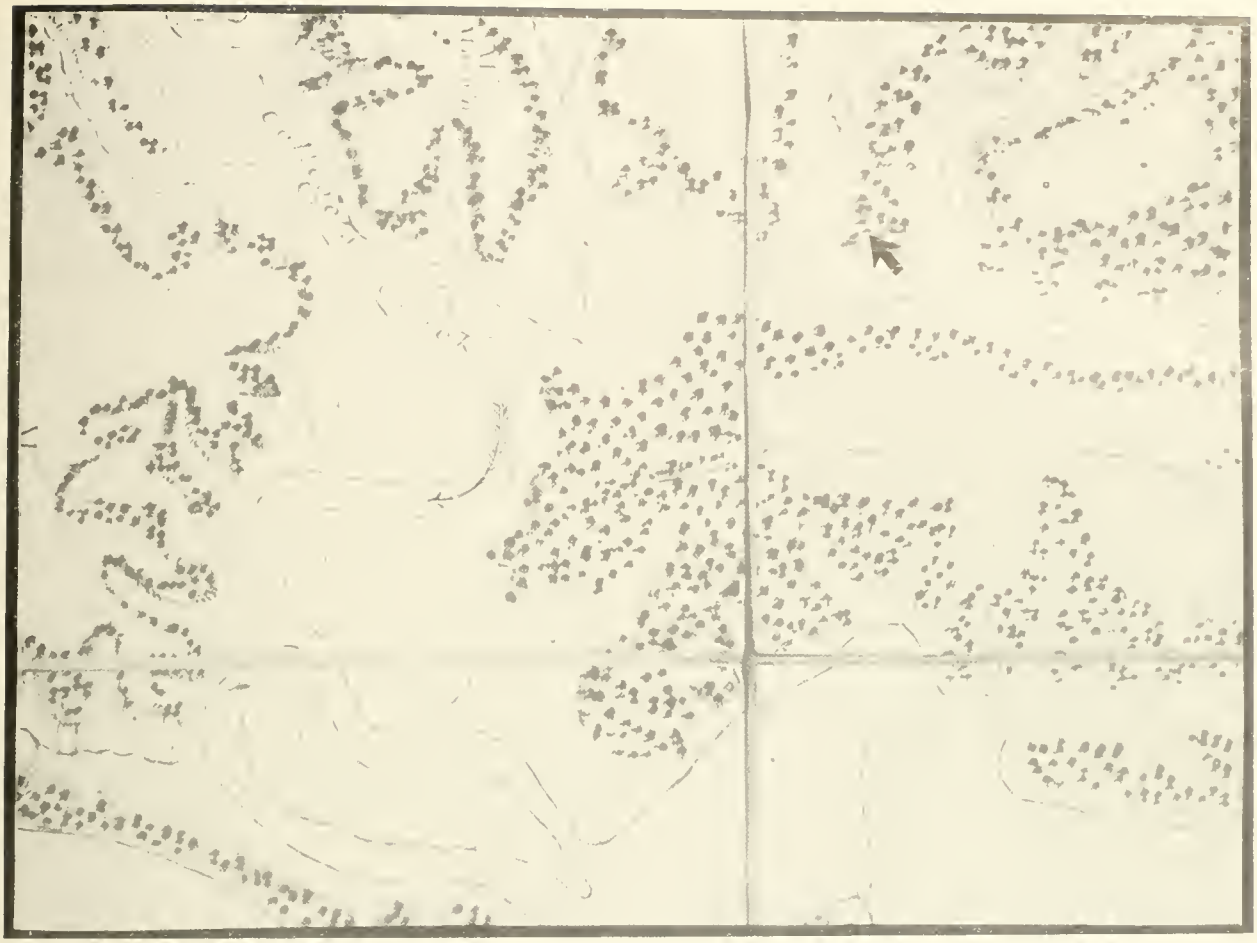

FIGURE 4.—DETAIL OF COLONEL DESANDROUIN'S MAP of 1781. Arrow indicates Jones site.

promontory as Tutter's Neck. Indeed the entire premise is built upon the discovery of wine-bottle seals in one refuse pit beneath the kitchen chimney and in another approximately 125 feet southeast of the house. These seals, bearing the initials "F J," were identified as having belonged to Frederick Jones, who later became Chief Justice of North Carolina. The identification was arrived at on the evidence of the will of David Bray, of James City County, that was contested in 1732. In the legal action, reference was made to ". . . one messuage,[2] plantation, piece or parcel of land," known as Tutties Neck, or "three hundred acres, more or less, lying and being in the parish of Bruton." This land was stated to have been purchased by Bray's mother, Judith Bray, from Frederick Jones; it then was obtained by John Randolph and passed by him in exchange to Thomas Bray.[3]

Thus we know that Frederick Jones had owned a 300-acre tract known as Tutties Neck. Consequently, the discovery of bottle seals bearing the initials "F J" in the vicinity of a "messuage" at the mouth of Tutter's Neck Creek was not without significance. Further corroboration was provided by a letter of 1721 from Frederick Jones to his brother Thomas, in Williamsburg, regarding the incorrect marking of

[2] "*Mesuage*, in Common law, is used for a dwelling-house, with Garden, Courtilage, Orchard, and all other things belonging to it" (E. PHILLIPS, *The New World of Words*, London, 1671).

[3] WILLIAM WALLER HENING, *Statutes at Large . . . A Collection of All the Laws of Virginia . . .*, vol. 4 (Richmond, 1820), p. 371

merchandise on the former's account "marked by mistake F ✠." [4] It was common practice for plantation owners to use the same shipping marks that they used for their wine-bottle seals, and therefore it may be assumed that Jones also owned bottles bearing the initials "F ✠."

Having established with reasonable certainty that the site in question was the "Tutties Neck" that had been purchased by Judith Bray from Frederick Jones, the next step was to attempt to piece together the history of the site both before and after that transaction. Unfortunately, during the Civil War the James City County records were removed for safekeeping to Richmond where they were destroyed. This loss makes any research into the early documentary history of the county extremely difficult, and in many cases well nigh impossible. Source material must be drawn from family papers and from passing references in the records of other counties. Although the history of Tutter's Neck has many significant facts missing, it is surprising that the record is as full as it is.

The first reference occurs in 1632 (or 1642) when mention is made of "great neck at the barren neck, next adjoining to Tutties neck, a branch of Archers hope creek." [5] Similar references to "Tutteys" neck and "lutteyes" neck occurred in 1637 [6] and in 1646.[7] Later, in 1679, a deed of sale from Edward Gray to William South of Gloucester County refers to a parcel of land at "Tuttis Neck." [8] The same spelling was used in 1682 in the will of Otho Thorpe, of the Parish of All Hallows at the Wall in London, who left to his cousin John Grice and Grice's two elder children his plantation in Virginia called "Tuttis Neck." [9] John Grice is recorded as having been a justice in James City County in 1685 and 1964.[10]

No further references to Tutter's Neck are to be found until 1711 when Frederick Jones obtained 100 acres commonly called "Lutties neck," [11] escheated land,[12] from one Mathew Brown. It is at this point that we run into trouble, for the contents of the pits in which the Jones bottles were found included many items of the late 17th century and none dating later than the first decade of the 18th century. The pit beneath the kitchen chimney also contained a bottle bearing the seal of Richard Burbydge and dated 1701.[13] The inference, therefore, was that Frederick Jones was on the site during the first years of the 18th century. Jones came from England in 1702,[14] having inherited considerable estates from his father, Capt. Roger Jones. In 1704 he is shown in the Virginia Quit Rent Rolls as possessing 300 acres in James City County, 500 acres in New Kent County, and 2,850 acres in King William

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[4] Papers of the Jones Family of Northumberland County, Virginia, 1649–1889 (MSS. Division, Library of Congress), vol. 1.

[5] "Patents Issued During the Royal Government," *William and Mary College Quarterly* (January 1901), ser. 1, vol. 9, no. 3, p. 143. In the 17th century prior to the building of the College of William and Mary, College Creek was known as Archer's Hope Creek, after the settlement of Archer's Hope at its mouth.

[6] There was a patent dated February 6, 1637, to "Humphry Higgenson" for 700 acres "called by the name of Tutteys neck, adj. to Harrop . . . E. S. E. upon a gr. swamp parting it from Harrop land, W. S. W. upon a br. of Archers hope Cr. parting it from Kingsmells neck, W. N. W. upon another br. of sd. Cr. parting it from land of Richard Brewsters called by the name of the great neck alias the barren neck & N. N. W into the maine woods." Richard Brewster's 500 acres were described as beginning "at the great Neck alias the barren neck, adj. to Tutteys Neck a br. of Archers hope Cr. parting the same, S. upon a br. of sd. Cr. parting it from Kingsmells Neck . . . . *Cavaliers and pioneers. Abstracts of Virginia Land Patents and Grants 1623–1800*, abstracted and edited by Neil M. Nugent (Richmond: Dietz Printing Co., 1934), vol. 1, pp. 80, 81.

[7] On July 19, 1646, a patent was granted to Richard Brewster [illegible] 750 acres, Land & Marsh, called the great Neck of Barren Neck next adjoining to lutteyes neck." "Patents Issued . . . ," *William and Mary College Quarterly* (July 1901), ser. 1, vol. 10, no. 1, p. 54.

[8] "Notes from Records of York County," *Tyler's Quarterly Historical and Genealogical Magazine* (July 1924), vol. 6, no. 1, p. 61.

[9] "Virginia Gleanings in England," *Virginia Magazine of History and Biography* (October 1904), vol. 12, no. 2, p. 179.

[10] "List of Colonial Officers," *Virginia Magazine of History and Biography* (January 1901), vol. 8, no. 3, p. 328; and "Lightfoot Family," *William and Mary College Quarterly* (October 1894), ser. 1, vol. 3, no. 2, p. 104.

[11] "Patents Issued . . . ," *William and Mary College Quarterly* (January 1904), ser. 1, vol. 12, no. 3, p. 186. For similar spelling see note 7, above.

[12] "Escheat, in Common-law, signifieth lands that fall to a Lord within his Manour, by forfeiture, or the death of his Tenant without Heirs; it cometh from the French word Escheire, to fall" (Phillips, *New World of Words*).

[13] On August 14, 1710, Richard Burbydge was among those who signed a report on the inspection of the vessel *Jamaica Merchant*, lying at anchor in the upper district of the James River, at the precept of Governor Spotswood. The inspectors were sworn by Capt. John Geddes, a justice of the peace for James County. (*Calendar of Virginia State Papers and other Manuscripts, 1652–1781*, edit. Wm. P. Palmer, M.D., Richmond, 1875, vol. 1, p. 141.) This is the only reference to Burbydge that has been found.

[14] L. H. Jones, *Captain Robert Jones of London and Virginia* (Albany, 1891), p. 34.

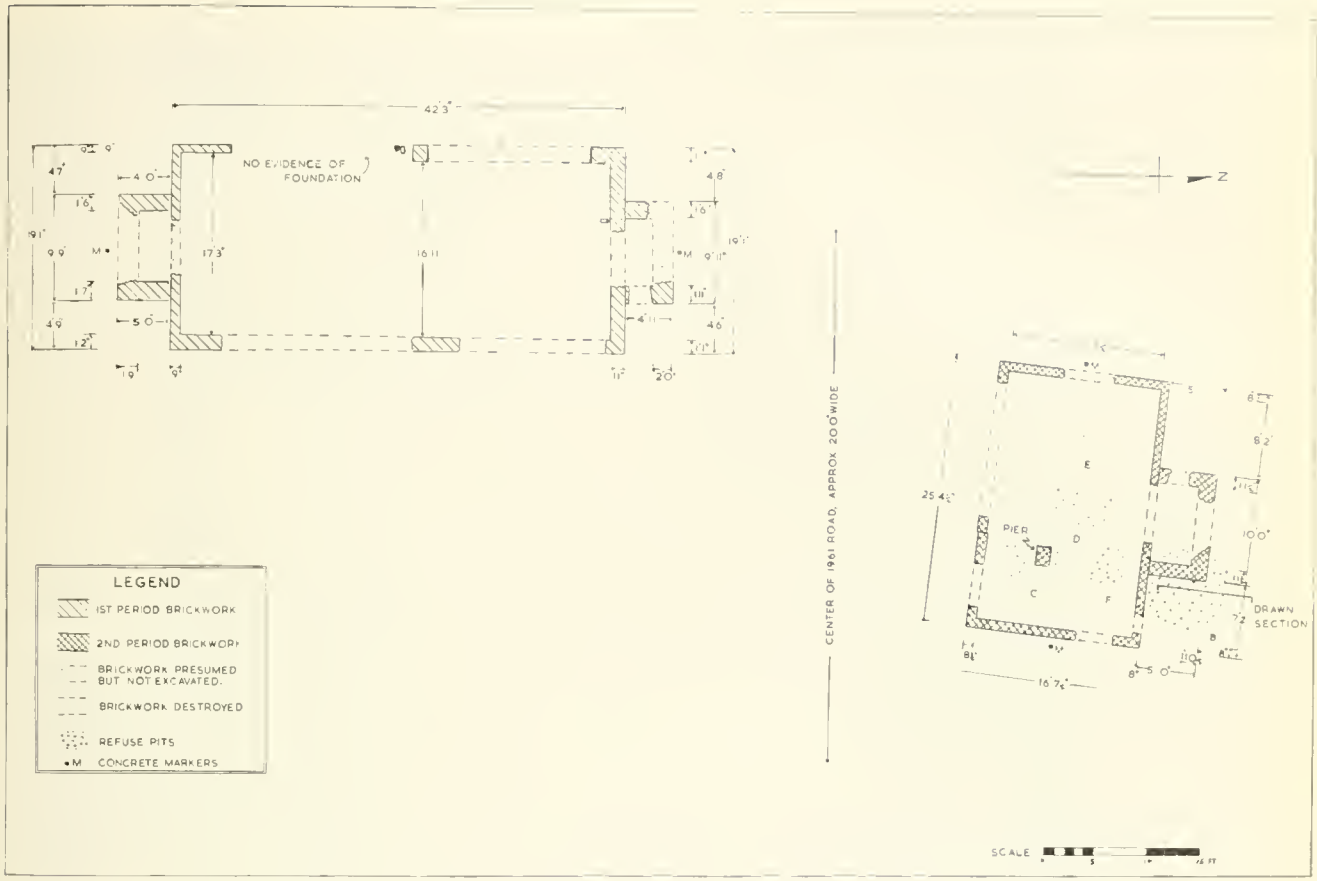

FIGURE 5.—PLAN of excavated features.

County.[15] Were it not for the purchase of 1711, it would be reasonable to assume that the 300 acres in James City County were the same that Jones sold to Judith Bray at some unspecified date prior to 1722, the year of his death.

We know that as early as 1703 Frederick Jones had interests in North Carolina, because it was in that year that one Jeremiah Goodridg brought suit against him and he was then described as "late of London." [16] In 1707 Jones received a grant of 4,565 acres in what are now Jones and Craven Counties in North Carolina.[17] At that time he was living in or near Williamsburg—presumably on his 300 acres in James City County; in 1705 he was a vestryman of the Parish of Bruton with its church in Williamsburg,[18] and in the same year both he and David Bray were listed as being among the directors for the building of Williamsburg.[19] It would seem that he was a man of consequence in the county at that time.

Among the papers of the Jones family are indentures dated 1708 transferring property in both King William and New Kent Counties from Frederick to his brother Thomas Jones,[20] and it may well be construed that this transfer occurred at the time that Frederick moved to North Carolina. In the same year his plantation in Chowan Precinct, North

[15] "Virginia Quit Rent Rolls, 1704," *Virginia Magazine of History and Biography*, vol. 31, no. 2 (April 1923), p. 157; vol. 31, no. 3 (July 1923), p. 222; vol. 32, no. 1 (January 1924), p. 72.

[16] *Colonial Records of North Carolina*, edit. William L. Saunders (Raleigh 1886), vol. 1, p. 590.

[17] ALONZO T. DILL, "Eighteenth Century New Bern," *North Carolina Historical Review* (January 1945), vol. 22, no. 1, p. 18.

[18] "Bruton Church," *William and Mary College Quarterly* (January 1895), ser. 1, vol. 3, no. 3, p. 180.

[19] HENING, *Statutes at Large*, vol. 3 (Philadelphia, 1823), p. 431.

[20] Papers of the Jones Family . . . , vol. 1.

FIGURE 6.—FREDERICK JONES' WINE-BOTTLE SEALS showing matrix variations: 1, initials from single matrix, with right side of "I" poorly formed (same die as fig. 7, left); 2, initials from separate matrices, with large serifs on "F" and small serifs on "I"; 3–5, initials from separate matrices, with small serifs on both letters; 6, 7, initials from separate matrices, with heavy serifs on both letters. Seal 5 came from Pit A; all others from Pit B. The use of single-letter matrices suggests a 17th-century date for the bottles' manufacture, while the presence of various die combinations makes it probable that the bottles were not all made at the same time. It is likely that the bottles were among Jones' possessions when he emigrated to Virginia in 1702.

Carolina, described as "land whereon the church now stands" was chosen as the site for a glebe.[21] This is presumably the same Chowan County plantation on which Jones died in 1722.

In 1711 Frederick Jones and others residing in North Carolina appealed to Governor Spotswood of Virginia for help against the Indians.[22] In the same year his name again occurs on an address to Spotswood

[21] *Colonial Records of North Carolina*, vol. 1, p. 680.

[22] Ibid., pp. 837, 838.

FIGURE 7.—WINE BOTTLES of Frederick Jones and Richard Burbydge, from Pit B. For scale see figure 10.

concerning Colonel Cary's rebellion.[23] Almost a year to the day later, he is recorded as applying at a council meeting for the return of salt carried from his house ostensibly for "Supporting y^e^ Garrisons." [24] In July 1712 Jones acquired an additional 490 acres in North Carolina.[25] All of this evidence points to his being well settled in his new home by 1712.

The colony of North Carolina developed more slowly than did Virginia. The first permanent English settlement in North Carolina was on the Chowan River in about 1653, with the population being drawn from Virginia. In 1663 the settled area north of Albemarle Sound became Albemarle County, when Charles II granted the territory to eight proprietors, in whose families it remained until an act of Parliament in 1729 established an agreement with seven of them (the eighth refused to sell) and thus turned the territory into a royal colony. Consequently, when Jones moved south, North Carolina was still in its infancy, a haven for piracy and beset by private feuds and troublesome Indians. In the years 1711–1712 occurred an Indian uprising of proportions comparable to those that had threatened the life of the Virginia Colony 90 years before.[26] It was this massacre of 1712 and its effect on the Jones family that occasioned the foregoing apparent digression into the early history of North Carolina.

The war with the Tuscarora Indians had begun in

[23] Ibid., p. 787.
[24] Ibid., p. 866.
[25] Ibid., p. 864.

[26] HUGH T. LEFLER AND ALBERT R. NEWSOME, *The History of a Southern State, North Carolina* (Chapel Hill: University of North Carolina Press, 1954), pp. 56–60.

1711 at about the time that Jones and his neighbors had appealed to Virginia for aid, and it was not to end until 1713 when the greater part of the defeated tribe moved north to New York to become the sixth part of the Iroquois Confederation. In October 1712 Jones' plantation was attacked; but in a letter from the president of the council, Pollock, to the Governor of South Carolina, it was stated that the attackers were " . . . beat off, none killed of our people." [27] Although there was no loss of life, it would appear that the effect on Jones' plantation was considerable.

In the Journal of the House of Burgesses at Williamsburg it was recorded that on November 5, 1712, "Frederick Jones, who some years ago removed two slaves out of this colony into North Carolina, his plantation having been totally ruined by the hostilities there; asks permission to bring his said negroes back again without paying duty." [28] Although the petition was granted, there is no indication that Jones did, in fact, return. The important phrase in this notice of petition is the "who some years ago," for it seems probable that this refers to the time when Jones left James City County to settle in North Carolina. Working on the assumption that "some years ago" would be unlikely to refer to a period of time short of three or four years, it can be construed that the date of removal fell in 1708 or 1709 at the latest.

However the evidence is interpreted, it still remains curious that Jones should have purchased the 100 acres of "Lutties Neck" in 1711 and that he should sell a 300-acre tract known as "Tutties Neck" to Judith Bray, when in fact he appears to have possessed a total of 400 acres in James City County, only one of which is known to bear a name resembling Tutter's or Tutties' Neck. The only reasonable construction must be that Mathew Brown's escheated acres adjoined 300 acres that already constituted Tutter's Neck. But even then there remains the problem of why only "by estimation, three hundred acres, more or less" [29] were sold to Mrs. Bray. No evidence has been found to show what became of the remaining 100 acres, and the only Virginia property mentioned in Frederick Jones' will of April 9, 1722, was described as "lying in King William County in Virginia, commonly called Horns Quarter." [30]

It is unfortunate that the direst gap in the documentary evidence spans much the same period as does the archeological data. However, the genealogy of the Bray family is of some assistance, providing clues even if it cannot offer direct answers. When Thomas Bray died on August 2, 1751, he was described as "Col. Thomas Bray, of 'Little Town,' next to 'Kingsmill,' on James River." [31] That property, lying to the east of the Kingsmill tract, can be traced back as far as 1636, and it is known to have been owned by the Pettus family in the latter part of the 17th century. [32] In about 1697 James Bray, son of James Bray, Sr., of Middle Plantation (later Williamsburg) married Mourning, widow of Thomas Pettus, Jr., and so acquired the "Little Town," or "Littletown," tract.[33] This James Bray had three children, of whom Thomas was the eldest and thus became heir to his father's estate.

James Bray, Jr., had two brothers (as well as a sister). The eldest son, Thomas, died intestate. David, the youngest of the three, married Judith (b. 1679, d. Oct. 26, 1720), by whom he had one son, David, Jr.,[34] who married Elizabeth Page (b. 1702, d. 1734) and had no heir. The previously discussed transaction of 1732 following the death of David Bray, Jr., whereby Thomas Bray obtained the "Tuttie's Neck" acres that had been purchased at an unspecified date by Judith Bray,[35] would suggest that Frederick Jones retained the title until 1717. This may be deduced on the grounds that Mrs. Bray would have been unlikely to have purchased land while her husband, David Bray, Sr., was still alive. Thus Jones would seem to have sold Tutter's Neck between 1717 and 1720 when Judith Bray died.

Thomas Bray, as stated above, lived at Littletown, and there is no likelihood that he ever resided at

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Colonial Records of North Carolina, vol. 1, p. 864.

"Notes from the Journal of the House of Burgesses, 1712–[illegible]," *William and Mary College Quarterly* (April 1913), ser. 1, vol. [illegible], no. 4, p. 249.

[illegible], *Statutes at Large*, vol. 4 (Richmond, 1820), p. [illegible].

[30] Papers of the Jones Family . . . , vol. 1.

[31] "Diary of John Blair. Copied from an Almanac for 1751, Preserved in Virginia Historical Society," *William and Mary College Quarterly* (January 1899), ser. 1, vol. 7, no. 3, p. 151, note 2.

[32] Conway Robinson, "Notes from Council and General Court Records," *Virginia Magazine of History and Biography* (October 1906), vol. 14, no. 2, p. 188, note 3.

[33] "Bray Family," *William and Mary College Quarterly* (April 1905), ser. 1, vol. 13, no. 4, p. 266.

[34] Ibid.

[35] Hening, *Statutes at Large*, vol. 4 (Richmond, 1820), p. 371.

Tutter's Neck. He married Elizabeth Meriwether and by her had one child, a daughter named Elizabeth who married Col. Philip Johnson.[36] The daughter died in 1765, and when her husband followed her in 1769 "six hundred acres, with the appurtenances, called and known by the name of Tutty's neck" were offered at auction.[37] It was presumably at this time that the Tutter's Neck land was added to the neighboring Kingsmill plantation of Lewis Burwell. William Allen, of Surry County, purchased Littletown in 1796, and in 1801 he added Kingsmill to his holdings along, one supposes, with Tutter's Neck; for in the inventory made at Allen's death in 1832 the latter property was listed as comprising 923 acres and valued at $2,330.00.[38]

As the archeological site under consideration was not occupied beyond the colonial period, there is no need to pursue its history through the 19th century. It is enough to note that Tutter's Neck is included in parcel no. 4 of the Kingsmill Tract now owned by Williamsburg Restoration, Inc. Part of this parcel is leased to the Chesapeake Corporation through whose courtesy excavation was made possible.

Captain Roger Jones and Frederick Jones

The discovery of the Tutter's Neck site and its artifacts associated with Frederick Jones arouses interest in the man himself and his place in colonial America. While those facets of his career directly relating to Tutter's Neck have been outlined above, a few additional facts may serve to round out our picture of the man.

In 1680 Capt. Roger Jones of London came to Virginia with Lord Culpeper and was given the task of suppressing piracy in Chesapeake Bay. His efforts in this direction resulted in considerable personal gain and he was able to amass extensive Virginia property. Eventually Roger Jones' activities caused so many complaints that he relinquished his office and returned to London. In 1692 a letter of petition from the Council of Virginia to the Earl of Nottingham, King William's principal Secretary of State, complained bitterly about the ravages by pirates to ships carrying supplies to the colony and in particular about the conduct of Roger Jones. This petition, signed by Francis Nicholson and others of the Council, contained the following enlightening passage:

> . . . Capt Roger Jones, some time an Inhabitant of this Country, but at p'sent residing in London. A man that, from noething, pretends in a few years to have gained a great Estate, & since he has declared his disaffection to y^r Ma^ty before his leaveing this Country, by refuseing to serve in any office, or take the usuall Oaths we pray y^r Lord^p leave to give you his true caracter. He came into this Country a souldier under the L Culpeper; was by his Ld^sp made Captaine of a small sloope w^h was to have been furnished with twelve men, & was ordered to cruise in our great Bay, to look out for & seize all unlawfull Trad^rs, &c. But y^e Captaine having learnt to cheate y^e King very early, never had above 8 men, altho he constantly received pay for 12 men, for w^h y^e Lord Culpeper endeavoured to call him to Acct., as well as for his adviseing, trading with & sheltering severall Pyrates & unlawfull Traders, instead of docing his duty in seizing them. By which means ye sd. Jones laid ye foundation of his p'sent great Estate, as he gives out he is master of."[39]

In 1701 Roger Jones died in Stepney, London, and was buried at Mansfield, Nottinghamshire, the home of his wife Dorothy (née Walker) by whom he had two sons. The elder son, Frederick, inherited the larger share of the estate,[40] and both he and his brother Thomas arrived in Virginia in 1702. Thomas remained in the colony throughout his life, but, as already shown, Frederick decided that North Carolina was more to his liking. In about 1708 Frederick disposed of most of his Virginia holdings and moved south, taking with him at least two Negro slaves and his wife Jane, whom he had married while in Williamsburg.[41]

There is no doubt that Frederick Jones prospered in North Carolina, and in 1717 he was appointed Chief Justice for the colony,[42] replacing the previous Secretary and Chief Justice, Tobias Knight, who had resigned in disgrace. The latter had made the mistake of being too open an accomplice of Edward "Blackbeard" Teach, the pirate. There is reason to

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[36] "Bray Family," pp. 266–267.

[37] Hening, *Statutes at Large*, vol. 8 (Richmond, 1821), pp. 460–464.

[38] Inventory of William Allen, in Surry County Wills, no. 6, 1830–1834, pp. 341–344.

[39] *Calendar of Virginia State Papers*, vol. 1, p. 39.

[40] The will of Roger Jones is preserved in the Public Records Office in London, but it is published in full in L. H. Jones, *Captain Robert Jones*, pp. 196–200.

[41] L. H. Jones, *Captain Robert Jones*, p. 34.

[42] Dill, "Eighteenth Century New Bern," p. 18.

suppose that even if Governor Eden did not personally profit from Teach's activities, he was fully aware that the pirate made his winter quarters in a North Carolina inlet. Teach was not finally cornered until November 22, 1718, in the famous exploit of Lieutenant Maynard off Ocracoke Inlet.[43] Jones had by then been in office for at least a year and he was doubtless aware of the Governor's sympathies. Indeed, with his own father's example to guide him, Jones was clearly an excellent choice for Chief Justice if leniency towards piracy was a prerequisite for the job. Although there is no evidence that Jones profited from Blackbeard's operations, the records show that he was quite prepared to turn the trust of his office to his own advantage. In the end it was a comparatively small manipulation that proved his undoing.

In 1721 one Daniel Mack Daniel murdered, by drowning, a certain Ebanezar Taylor and carried off his goods and money to a total of £290.0.0d. When Mack Daniel was apprehended the money was passed for safekeeping to Frederick Jones, who apparently pocketed it. On April 4, 1722, the following entry appeared in the *Colonial Records of North Carolina:*[44]

> It's the Opinion of this Board that the money lodged in the said Coll° ffred^k Jones hands late Cheif Justice for the appearance of Robert Atkins and Daniel Mackdaniel at the Gen^l Court ought to have been deliver^d to the present Cheif Justice with the Gen^l Court Papers & Records.
>
> Order^d that the said Coll° ffredrick Jones late Cheif Justice doe immediately pay to Christopher Gale Cheif Justice or his Order whatever moneys he has in his hands lodged as aforesaid . . . in case of failure hereof the Attorney Gen^l is hereby Order^d to take proper measures for the recovery thereof.

At the session of July 31 to August 4, 1722, Jones was due to appear to answer the charge that he had failed to relinquish the money. But when the session opened, it was reported that Colonel Jones was dead.[45] He had made his will only five days after the initial order of April 4 had been issued.[46]

Frederick Jones was in many respects a worthy and upright member of the North Carolina Council, or so one would gather from the opinion of Hugh Jones (no relation), who wrote: "Col. Frederick Jones, one of the Council, and in a good post, and of a good estate in North Carolina, before his death applied to me, desiring me to communicate the deplorable state of their Church to the late Bishop of London."[47] Frederick Jones presumably thought no better of the state of education in the colony, for we know that in the period 1719–1721 two of his sons were at school in Williamsburg.[48]

The Excavation

As stated in the introduction, the area and intensity of the excavations were limited by time and prevailing local conditions. Being aware of these restrictions from the outset, no attempt was made to undertake the total clearance of either the residence or kitchen. Instead, carefully restricted cuttings were made across the foundations to obtain the maximum information with the minimum effort, at the same time retaining sufficiently large undisturbed areas to merit total clearance of the site at some future date. As the area is now covered by fast-growing trees it is unlikely that such an operation would be feasible within the next 15 or 20 years. In the meantime, however, Colonial Williamsburg has erected concrete markers (see fig. 5) to record the positions of both buildings.[49] No excavation of any sort would have been undertaken at this time had not the foundations been so extensively and irreparably mutilated by the 1959 bulldozing. The loss of all the topsoil and the scooping of the upper courses of the foundations into banks to serve as windbreaks had done such damage that it was essential that something be done before the new growth took hold.[50] The operation should

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[43] Samuel A. Ashe, *History of North Carolina* (Greensboro: C. L. Van Noppen, 1908), vol. 1, pp. 200–204; and Lefler and Newsome, *History of a Southern State*, pp. 63–64.

[44] *Colonial Records of North Carolina*, vol. 2, p. 472.

[45] Ibid., p. 475.

[46] Text of the will is given in L. H. Jones, *Captain Robert Jones*, pp. 200–205.

[47] Hugh Jones, *The Present State of Virginia* [1724], edit Richard L. Morton (Virginia Historical Society, 1956), p. 104.

[48] "The Cocke Family of Virginia," *Virginia Magazine of History and Biography* (October 1897), vol. 5, no. 2, p. 192.

[49] Two concrete fenceposts have been set up on the north-south axis of the residence, the posts being driven immediately beyond the respective chimney foundations. Two additional posts have been erected on the east-west axis of the kitchen.

[50] As the work progressed, access to the site became increasingly difficult, necessitating the abandoning of transport farther and farther from the scene of operations. However, in the winter of 1960–1961, after all save the last trench had been dug, the Chesapeake Corporation crew drove a new road through the neck, a road which in fact cut right through the middle of the archeological area. By great good fortune the road passed between the two buildings without doing much more damage than had already been done by the earlier bulldozing.

be correctly described, therefore, as a rescue project rather than an archeological excavation in the classic manner.

Initial work on the site was confined to a survey of the area and the recovery of artifacts such as ceramics, glass, and brickbats scattered on the top of the disturbed clay. The principal concentration of artifacts was encountered in the brick-strewn vicinity of the residence and kitchen, though neither feature was immediately discernible. This scatter was flanked on the west by a windbreak of humus, clay, and fallen trees, and had run out before reaching a parallel windbreak to the east. Finds extending in the direction of the latter break included English white salt-glazed sherds as well as bottle fragments of the second quarter of the 18th century. A similar scatter of later artifacts was found extending down the southern slope of the neck at that extremity of the two breaks. In no instance were any fragments of white salt glaze found in stratified deposits, and it must be assumed that they emanated from the disturbed topsoil.

To the southeast of the eastern windbreak on ground sloping towards the secondary stream was found a scatter of brick dust extending over an area approximately 12 ft. by 14 ft., in the center of which was a concentration of large overburnt brick fragments with reddened clay beneath. No evidence of any laid bricks was encountered, and it is possible that this was the site of brickmaking rather than of a structure. The only datable artifact found in the vicinity was the base of a wine bottle of the first quarter of the 18th century that was lying in the silted bottom of a nearby rainwashed gully running towards the stream.

Close to the southern extremity of the east windbreak was found a refuse pit (Pit A) containing a quantity of late 17th-century or early 18th-century wine-bottle fragments, among them one with the seal "F ⅃." Some 70 feet northwest of this pit was located an area of laid brickbats that measured 4 ft. 6 in. by 4 ft. 6 in.; around the edges of this area were found a few fragments of early 18th-century wine bottles and one bottle base of the mid-century. This last was the latest fragment found on the site. No explanation for the presence of the brickbats was forthcoming, and no further brick deposits were encountered in the vicinity.

Beyond the west windbreak and in line with the residence were found numerous glass and pottery fragments of the first and second quarters of the 18th century, none of them in situ. It was presumed that they stemmed from the vicinity of the residence and were spread about by the bulldozing before the windbreaks were pushed up. Over and above the artifacts and features listed above, no other evidence of colonial occupation was discovered except in the immediate vicinity of the two buildings.

The location of the structures was at once apparent on the evidence of large quantities of disturbed bricks and mortar scooped into east-west furrows by the bulldozers. Careful probing in the two largest concentrations of brickbats soon located sections of the foundations of both buildings. It was then a simple matter to trace out the plans of each building before any digging was undertaken. This done, test cuttings were made at the corners and across the chimney foundations. Subsequently, additional cuttings were made within each building to determine whether or not either possessed a cellar. In the course of this work on the smaller of the two structures, numerous refuse pits were located that helped to provide a terminus post quem for its construction. Each of these pits was treated as an individual feature and will be discussed in detail in its proper place.

The Residence

The house, as previously stated, was built on a north-south axis with its west face looking toward College Creek. It looked eastward along the track that led to the road linking Williamsburg with Burwell's Ferry (Kingsmill) on the James River. The residence possessed exterior measurements of 42 ft. 3 in. by 19 ft. 1 in. with a chimney foundation at the south measuring 9 ft. 9 in. by 5 ft. and another, at the north, measuring 9 ft. 11 in. by 4 ft. 11 in. These chimneys had sides of varying thicknesses: 1 ft. 7 in., 1 ft. 9 in., 1 ft. 6 in., 1 ft. 11 in., 2 ft., and 1 ft. 6 in. The east and north foundations of the house itself were a brick and a half (1 ft. 1 in.) in thickness, but the south wall was only one brick thick (9 in.), although the two foundations were bonded into one another at the southeast corner. An even more curious situation was provided by the west wall which extended south from the northwest corner at a thickness of 1 ft. 1 in. and for a distance of 24 ft. 3 in., whereupon it stopped. At this point the three surviving courses were stepped back, indicating that although there was no flush end, the bond had not been intended to continue. At a point 9 in. farther

south, one brick and two bats were found continuing on the same line. No further trace of a west wall was found until a point was reached 8 ft. from the southwest corner. Here, stepping down as did the northern section, the foundation continued to the corner, rising to a height of four courses, but only one brick in thickness.[51] Neither the break in the west foundation nor the curious variation in the thickness of the foundations has been explained.

It was suspected that the building might have possessed a porch chamber extending to the west, but no westerly projecting foundations abutted against the stepped ends of the west wall. The presence of the west windbreak made any further excavation in that direction impossible, and it could be argued that a porch chamber might not have had foundations as deep as those of the house proper. If this were so, then it is conceivable that they were dismantled along with the rest of the building in the mid-18th century and that any remaining traces have been destroyed by the bulldozing.

A single fragment of a polychrome Bristol delftware charger, with nails and window-glass fragments, was found in the builder's trench at the southern extremity of the northern section of the west foundation (deposit T.N. 27).[52] The sherd is attributed to the period about 1680–1700, and it is the only clue as to the construction date of the residence. In loose fill inside the foundation in the same general area as the above find were located part of a lead-glass tumbler and the front of an iron padlock. The tumbler fragment could not date before the first quarter of the 18th century, and might be later.

Two test cuttings were made inside the building in the hope of locating a cellar, but none was found. However, a neck of a wine bottle dating no earlier than about 1740 was discovered amid the debris of the house (T.N. 28). It should be noted that this debris showed no indication of burning.

It was apparent that the house had been of frame construction resting on brick foundations laid in English bond. It was a little over twice as long as it was broad, and appeared even longer when seen with its massive exterior chimneys at either end. Such a house would probably have been a story and a half in height, having an A roof with dormers probably facing both east and west.[53] Fragments of small panes and lead window cames found in the excavations suggest that the windows were leaded and therefore of casement type. On the first floor there probably were two rooms—a hall and chamber—perhaps divided by a central passage with exterior doors at either end. Prior to the building of the separate kitchen, the hall may have been used for cooking. Above, there were probably two rooms approached by a staircase leading from the passage. This reconstruction assumes, of course, that no porch chamber existed on the west side.

Since no evidence of a dirt or brick floor was encountered, it is assumed that the floors were of wood. Beyond establishing, from foundation widths, that the building was of frame construction, it must be noted that no archeological evidence of the above-grade appearance of the building was forthcoming. Mr. E. M. Frank, director of architecture for Colonial Williamsburg, whose conjectural elevation provides the frontispiece to this paper, points out that the roof may have been made from lapping oak strips some four feet in length, as were found at the Brush-Everard House in Williamsburg. He further suggests that the weatherboards could also have taken the form of similar split-oak strips, precedent for which survives in the west wall of the John Blair House, also in Williamsburg.

A house of the above proportions and character was a little better than many a yeoman's home in England, although it owed its origins to those same homes. It was larger than the smaller houses of Jamestown, but only just as large as the smaller houses of Williamsburg, whose sizes were regulated by an Act of Assembly in 1705. The Tutter's Neck residence differed from most of the Williamsburg houses in that it had no cellar. While it was a perfectly adequate house for a Williamsburg citizen of average means and status, one might be tempted to assume that it would not long have sufficed as the home of Col. Frederick

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[51] The builders had made use of oystershell mortar. Specimen bricks ranging in color from pale salmon to a purplish red have the following measurements: 8⅞ in. by 4¼ in. by 2¼ in. and 8⅞ in. by 4⅛ in. by 2½ in.

[52] The "T.N." number in parentheses represents the field number of the Tutter's Neck deposit.

[53] A house of similar character was photographed at Yorktown in 1862; see A. Lawrence Kocher and Howard Dearstyne, *Shadows in Silver* (New York: Scribner, 1954), p. 82, fig. 3, no. 17. The Bracken House in Williamsburg also is similar; see Marcus Whiffen, *The Eighteenth-Century Houses of Williamsburg* (Williamsburg, 1960), p. 57, and figs. 5, 6.

Jones who, in North Carolina, aspired to 6 children and 42 slaves.[54]

On the other hand, it may be noted that the Carters of "Corotoman" on the Rappahannock, one of the wealthiest families in Virginia at the beginning of the 18th century, had lived in a rather similar house prior to the building of an imposing and larger brick mansion. The latter burned in 1729, whereupon Robert "King" Carter moved back into the old 17th-century house. Carter's inventory made at the time of his death in 1732, and now in the possession of the Virginia Historical Society, identifies the rooms in the "Old House" as comprising a dining room, chamber over the dining room, lower chamber, chamber over the lower chamber, and a porch chamber. This last strongly suggests that the "Old House" was of 17th-century date. As other buildings named in the inventory are noted as being of brick (probably advance buildings for the burnt mansion), it may be assumed that the "Old House" was of frame construction and so might well have been of the same class as the Tutter's Neck residence. A further similarity is to be found in the fact that the Carter inventory lists no cellars beneath the "Old House."

The Kitchen

Like the residence, this subsidiary building was not without its unusual features, the most obvious being the position of the massive chimney standing against the main east-west axis of the building instead of at one of the ends, the normal position. Thus, instead of being supported by the A of the roof, the chimney was freestanding above the first floor with the pitch of the roof running away from it.

The building possessed external measurements of 25 ft. 4½ in. by 16 ft. 7½ in.; the foundations, laid in English bond, were one brick (9 in.) thick. The chimney abutted against the north wall, measured 10 ft. by 5½ ft.; its sides were 11 ft., 1 ft. 9 in., and 11 in. thick.[55] Such a building would have stood to a height of a story and a half with one room on the first floor and a rude attic above, probably approached from a ladder.

Cuttings across the foundations showed that the bricks were unevenly laid. At one point in the south wall the bricks jogged out to a distance of two inches, as though the foundation had been laid from both ends and failed to meet correctly in the middle. There was no possibility that this unevenness could have been caused by settling or root action after building, for the builder's trench was filled with clearly defined burnt clay that also followed the jog.

The same red clay was packed in the builder's trench all around the kitchen building. It was also used to span soft depressions resulting from refuse pits dug and filled with trash before the building was erected. For some unexplained reason the kitchen was constructed over an area that previously had been set aside for the burying of domestic refuse. The largest and earliest of the five pits excavated was situated partially beneath the massive kitchen chimney, whose foundation, not surprisingly, had settled into the pit. Another rectangular pit in the middle of the building was not only topped with a pad of red clay but was partially covered by a cap or pier of laid brickbats that perhaps served as a support for floor joists.

The presence of the pits sealed beneath the kitchen provided two pieces of information: that the site had been occupied for some time before its construction, and that it was not built before about 1730 or 1740—this on the evidence of a wine bottle found at the bottom of Pit D. If this was the first separate kitchen building erected on the site, it must be assumed that the cooking was originally carried on in one of the first-floor rooms of the residence. However, the fact that the archeological excavations were so limited makes any conjecture of that kind of dubious value.

The unusual construction of the kitchen and its situation in the trash area at a skew with the residence might prompt the conclusion that it was built without much consideration for the beauty of the whole. It is probable that the kitchen was erected after the house had ceased to be the residence of the owner or a tenant of the Tutter's Neck acres, and that the dwelling was then a slave quarter. Such a conclusion is supported by the presence in Pits D–F, of numerous fragments of Colono-Indian pottery, a ware produced by Tidewater Indians in pseudo-European forms and probably intended for the use of the slave population. The construction date of the kitchen in the decade 1731–1740 would place it in the ownership of Col. Thomas Bray, who resided at Littletown (see p. 40). Thus the Tutter's Neck residence is at best unlikely

[54] Negroes belonging to the estate of Frederick Jones are listed in Papers of the Jones Family, vol. 1, November 29, 1723.

[55] Oystershell mortar was used. Sample bricks are pale salmon to overfired red and measure 8 in. by 3⅞ in. by 2½ in. and 8¾ in. by 3¾ in. by 2½ in.

to have been any more than the quarters of an overseer, or, at worst, communal housing for slaves working in that area.

Such a conclusion would help to explain the fact that the majority of artifacts found in the site's later deposits were of dates much earlier than their contexts would suggest. Many items of pottery and cutlery were of late 17th-century date, though found in refuse pits of about 1730–1740. This would not be so surprising were it not for the fact that few, if any, such items have been found in excavations at Williamsburg, a town that was firmly established throughout the period covered by the Tutter's Neck occupancy as determined by the excavations. But if the kitchen site was used as a slave quarter, it would be logical to expect that such things as pottery and cutlery would have been old before being relegated to that location. A graphic example is provided by the latten spoon from Pit D that dates from the period about 1660–1690 (fig. 15, no. 13) and which had seen such service that it had been worn down to half its bowl size before being discarded.

The Refuse Pits

A total of six refuse pits were excavated, five of them entirely or partially sealed beneath the foundations of the kitchen. All five consequently predated that structure, though Pit B (see fig. 5) was probably 20 years earlier than the others. Pits C–F, on the other hand, were probably all dug within a short time of each other. They were approximately the same size and depth and were situated within a few inches of one another, although none overlapped its neighbor. It may be deduced, therefore, that the pits were dug in such close succession that the outlines of the preceding pits were still visible to the digger. It is possible that they may have been privy pits. Concrete evidence indicating the close relationships between these pits was provided by fragments of the same Colono-Indian bowl found in both Pit D and Pit E.

PIT A

This deposit (T.N. 31) was located farthest from the buildings, being situated, as previously noted, about 125 feet southeast of the residence on the south slope of the neck. As elsewhere on the site, the topsoil over the pit had been removed, leaving only the lower portions of the dirty yellow clay deposit intact. This pit measured 8 ft. by 5 ft. and extended to a depth of only 1 ft. 2 in. into the surrounding natural yellow clay. A tree stump obscured a small part of this oval pit, but it is believed that its presence prevented few, if any, artifacts from avoiding recovery. The finds comprised two or three sherds of coarse pottery of no identifiable form, part of the base of an English delftware mug ornamented with sponged manganese, one clay pipe of about 1700, and fragments of at least 18 wine bottles of the period about 1690–1710. One of these fragments bore an "F ℍ" seal from the same matrix as another found in Pit B.

The location of Pit A so far from the house and in a totally different area from the only other pit of the same date (Pit B) suggests that there was little consistency in the deposition of trash in the early years of the century. It is possible that the pits were created when tree stumps were removed and were filled with trash no matter where they happened to be. The fact that modern tree roots invariably sought the richer soil of the pits' contents makes it quite probable that there are numerous other pits on the site that are still hidden beneath standing trees or cut stumps.

Dating: There is little doubt that Pit A was filled during the first decade of the 18th century.

PIT B

This pit (T.N. 30) was approximately circular, with a diameter of 9 ft. 4 in. and a maximum depth of 2 ft. 8 in. It was covered by part of the kitchen's north wall and by the whole of the east side of the kitchen chimney. It was apparent that the builders knew that the pit was there, for a considerable number of brickbats were laid under the foundation of the chimney's northeast corner in an entirely abortive attempt to prevent it from settling. It is probable that the pit was initially a stump hole, there being a large quantity of dirty, greenish-gray clay at the bottom from which no artifacts were recovered (see fig. 8.) It is probable that this clay was redeposited when the stump and attached roots were dug out. Subsequently, the remaining concavity served as a rubbish pit into which more than 120 broken wine bottles were thrown. All these bottles belonged to the same period (1690–1710) as those in Pit A, and among them were five seals marked "F ℍ" and one seal bearing the legend "Richard Burbydge 1701." [56]

[56] Ivor Noël Hume, "The Glass Wine Bottle in Colonial Virginia," *Journal of Glass Studies* (Corning Museum, 1961), vol. 3, p. 99, fig. 3, type 6.

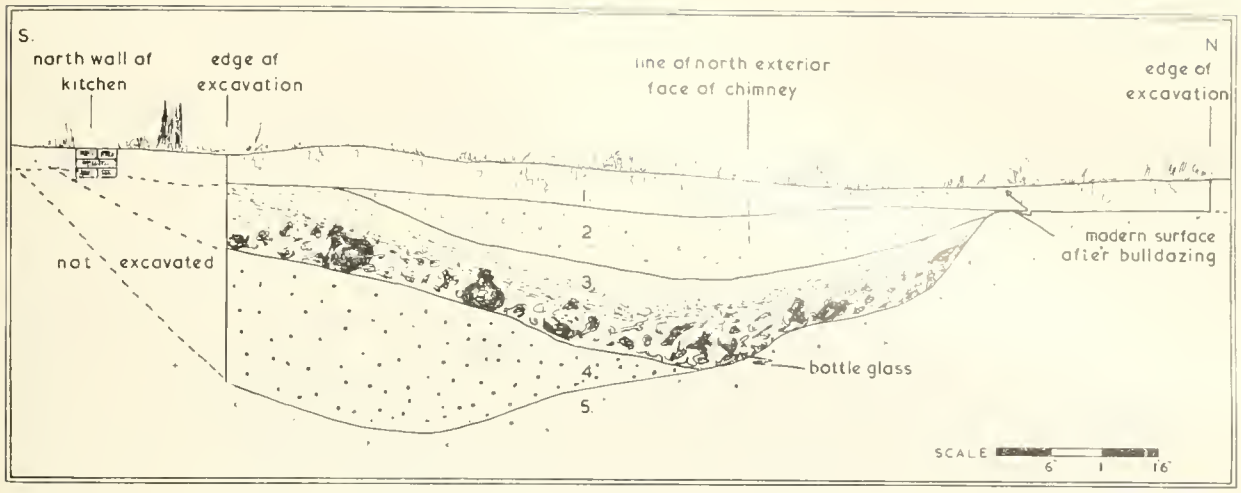

FIGURE 8.—SECTION through the filling of Pit B.

Other finds included fragments of English delftware, among them a very large polychrome charger that had been intended as a wall or dresser ornament, and a most unusual saucer-shaped vessel, ornamented with splashes of blue, that resembles a reversed form of the London copies of Nevers faïence.[57] Additional finds included North Devon [58] and other coarse earthenwares, a millefiori bead, and an English wine-glass in the Hawley Bishop style dating about 1690.

Dating: The evidence of the bottles indicates a filling date in the first decade of the 18th century.

PIT C

Covering the top of this pit was a layer of reddish clay, the same type of clay that was used in the backfilling of the builders' trench around the kitchen foundations. The clay was directly covered by brick rubble from the building's destruction stratum. From between the clay and rubble (T.N. 15) came fragments of an iron saw some 17 in. long and a brass harness fitting of unusual form. Set into the clay level was the base of a brick pier made from brickbats and intended to provide added support over the soft filling of a pit measuring approximately 6 ft. by 4 ft. 3 in. and having a total depth of 2 ft. 6 in. The walls were carefully trimmed and the bottom was flat, leaving no doubt that this cavity was dug as a refuse pit and was not a converted stump hole.

The red clay described above gave way to a yellow clay beneath the brick pier from which level (T.N. 16) came a few unimportant pottery fragments, a shoulder fragment from a wide-mouthed jar, and an iron harness buckle. Beneath this stratum was encountered the main pit filling, comprising a thick stratum of wood ash (T.N. 17) which blended towards the corners of the pit into pale clay (T.N. 18) that has probably silted in from the sides. From the ash deposit came part of a sickle, the bowl of a much-decayed pewter spoon, objects of turned bone, tobacco pipes, and a silvered-brass harness ornament. Somewhat surprisingly, the stratum also contained part of a plate comparable to the delftware charger from Pit B, though the date of the deposit was probably 20 or more years later.

The silted clay at the bottom of the pit included numerous clay-pipe fragments whose stem holes, following the Harrington theory, pointed to a date in the period about 1735–1750. Other finds included coarse earthenwares from Yorktown, delftware, and part of a pewter spoon handle.

Dating: About 1740.

PIT D

This was a rectangular rubbish pit measuring approximately 5 ft. 10 in. by 4 ft. and having a maximum depth of 2 ft. 8 in.—measurements closely

[57] See F. H. GARNER, *English Delftware* (London: Faber and Faber, 1948), p. 15 and fig. 30a.

[58] See C. MALCOLM WATKINS, "North Devon Pottery and Its Export to America in the 17th Century" (paper 13 in *Contributions from the Museum of History and Technology: Papers 12–18*, U.S. National Museum Bulletin 225, by various authors; Washington: Smithsonian Institution, 1963).

FIGURE 9.—BOWL OF BUFF-COLORED EARTHENWARE with a brown lead glaze and with "ELIZABETH GOODALL 1721" inscribed in slip. Probably Staffordshire. Height, 7½ in. This bowl parallels one of similar ware found at Futter's Neck (fig. 19, no. 9). Colonial Williamsburg, Department of Collections, no. 1960–430.

resembling those of Pit C, which was situated only one foot to the east. Stratigraphy also followed much the same sequence: Four inches of brick rubble on the top (T.N. 26), then 6 inches of red clay (T.N. 22) overlying the main fill of wood ash and becoming mixed with silted clay at the bottom (T.N. 23). The red clay had mixed with the top of the pit fill and a number of artifacts spanned the division of the strata, among them a rim sherd from a polychrome delftware charger (about 1670–1690) and part of an inverted baluster wineglass stem of the beginning of the 18th century.

The primary ash deposit, which proved to be the richest on the site, included delft drug-jar fragments, porringers and bowls, Westerwald tankard sherds, brown stoneware, Yorktown coarse wares, and much Colono-Indian pottery. Small finds included pewter spoons, scissors, part of a sword guard, iron dividers, and a sickle and table knives of late 17th-century character. Tobacco-pipe fragments pointed to a dating in the third decade of the 18th century, as also did a single wine bottle found at the bottom of the pit.

Dating: About 1730–1740, on the above evidence.

PIT E

This deposit lay some 3 feet to the west of Pit D, and it was found on the last day of excavation. Consequently time only permitted a test hole (measuring 1 ft. 9 in. by 1 ft. 9 in.) to be made into the pit at its northwest corner, from which point horizontal probing indicated that the pit measured 4 ft. by 2 ft. 8 in. and was shown by the test cut to be 2 ft. 9 in. deep. Unlike the other pits in this series, the contents consisted of a single brown-soil deposit (T.N. 24) containing brickbats, oystershells, and a small quantity of ceramics, notably the base of an ornamental delftware cup and a large part of a Yorktown earthenware bowl. Of significance was a fragment of Colono-Indian pottery that joined onto a bowl found in Pit D, indicating that both deposits were of the same date. Additional finds included pipe fragments and an iron horseshoe.

Dating: About 1730–1740, principally on evidence of matching sherds of Indian pottery.

PIT F

This was an oval pit situated 2 feet north of Pit C. Being only partially within the area of excavation and owing to its close proximity to the poorly preserved north foundation of the kitchen, this deposit was only partially excavated, i.e., an area 4 ft. 2 in. by 3 ft. 9 in. The pit had a depth of 1 ft. 10 in. and contained a deposit of ash mixed with dirty clay (T.N. 19). From this filling came several pieces of Colono-Indian pottery, polychrome delftware, Yorktown earthenwares, Chinese porcelain, part of a heavy wineglass knop, and one minute sherd of white salt glaze on which the pit's terminal dating is based.

Dating: About 1730–1740.

OTHER DEPOSITS YIELDING ARTIFACTS ILLUSTRATED

Deposits T.N. 1, T.N. 2.—Deposit T.N. 1 was in a 6-inch stratum of rich black soil outside the northwest corner of the kitchen and partially covered by a large tree stump. While some of the black dirt overlay the corner foundation, its looseness suggests that it was pushed there during the bulldozing. No traces of the stratum extended inside the kitchen, and the artifacts were consistently of dates prior to the construction of the building. Finds included a pewter spoon handle, brown stoneware with a rare white interior, a tobacco-pipe bowl with maker's initials "H S," a wineglass stem comparable to that from pit B, and panes of window glass measuring $2\frac{1}{8}$ in. by $1\frac{7}{8}$ in. and $1\frac{5}{8}$ in. by $2\frac{7}{16}$ in.

Deposit T.N. 2 was a 2-inch layer of burnt clay flecked with wood ash. It lay beneath the black soil level and probably was deposited when the kitchen was built. Consequently, the upper level can only have been laid down after that time. Finds included one sherd of Spanish majolica and a fragment of a tobacco-pipe bowl bearing the name of Tippet, a family of Bristol pipemakers in the late 17th and early 18th centuries.[59]

Dating: It is assumed that the clay (T.N. 2) was contemporary with the construction date of the kitchen (about 1730–1740) and that the black fill (T.N. 1) was deposited soon afterward.

Deposit T.N. 3.—A continuation of the red clay inside the kitchen chimney. Finds include one Rhenish "Bellarmine" [60] sherd and a pewter spoon handle.

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[59] Adrian Oswald, "A Case of Transatlantic Deduction," *Antiques* (July 1959), vol. 76, no. 1, pp. 59–61.

[60] For an example of comparable shape and date, see figure 6 of Ivor Noël Hume, "German Stoneware Bellarmines—An Introduction," *Antiques* (November 1958), vol. 74, no. 5, pp. 439–441.

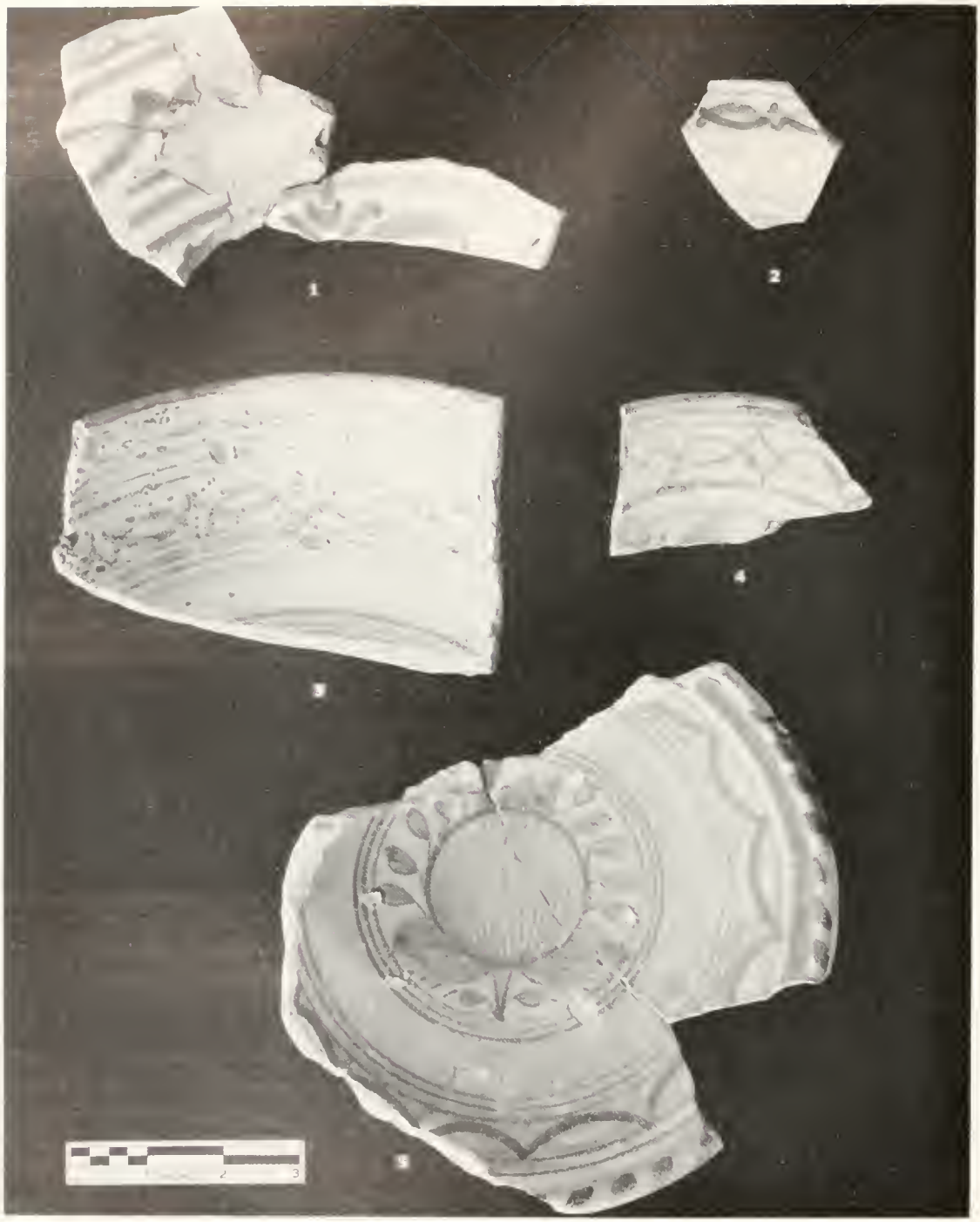

FIGURE 10.—FRAGMENTS OF SIMILARLY ORNAMENTED 17TH-CENTURY DELFTWARE from Tutter's Neck, London, and Holland: 1, with blue and orange decoration, from Tutter's Neck, Pit B; 2, with blue decoration, from Tutter's Neck, Pit D; 3, bowl waster with blue, orange, and green decoration, from Toolley Street kiln site, London; 4, plate with blue decoration from Toolley Street site; 5, plate decorated in blue, orange, and green, from Dutch Limburg. The Netherlands dish, earlier than the English examples, clearly indicates the source of the border design.

FIGURE 11.—INTERIOR BASES OF DELFTWARE SALTS with identical Carolian profiles. *Left*, from Tutter's Neck, Pit D; *right*, from the Thames at London. Diameter of each base is $1\frac{3}{4}$ in.

Dating: Same as T.N. 2, about 1730–1740.

Deposit T.N. 4.—A stratum of black soil overlying the red clay outside the southwest corner of the kitchen foundation. Finds include wine-bottle fragments dating about 1690–1710, brown stoneware, Yorktown coarse earthenware, and English delftware sherds.

Dating: After kitchen construction, probably in the same decade, about 1730–1740.

Deposit T.N. 10.—Black humus mixed with plaster and brickbats outside the west wall of the residence's north chimney. The only find of importance is a well-preserved, two-tined, iron table fork.

Dating: The stratum represents the destruction level of the residence, and the scant dating evidence recovered from T.N. 18, etc., suggests that the building had ceased to exist by 1750, or possibly a few years earlier.

Deposit T.N. 27.—The field number covers two deposits that blended together in their upper levels. They comprise the back filling of the builder's trench against the residence's west foundation (see p. 44)—from which came a single delftware charger sherd of about 1680–1700—and a stratum of black humus mixed with mortar and plaster representing the destruction layer of the house. The bulldozing had caused considerable disturbance to both layers, but it can be safely accepted that the delft sherd belonged to the construction date of the residence and that a lead-glass tumbler base and an iron-padlock fragment came from the destruction stratum.

Dating: The construction date for the house relies on the insufficient evidence of the single delftware sherd mentioned above, i.e., after about 1680. The destruction dating comes not from the items noted here but from the bottle neck discussed under T.N. 28, after about 1740.

Deposit T.N. 28.—A test cutting inside the residence on the line of the supposed central hallway that revealed 9 inches of humus mixed with mortar and plaster resting on natural clay. From the above level came one bottle neck of about 1740. On this evidence and on the evidence of unstratified sherds found in the occupation area, it is assumed that the complex had been abandoned by the middle of the 18th century.

Dating: After about 1740.

Animal Remains

Animal bones and marine items were largely confined to the refuse pits previously discussed, although

FIGURE 12.—COLONO-INDIAN CUP excavated at Williamsburg which is comparable to a fragment from Tutter's Neck (fig. 18, no. 17). Height, $3\frac{7}{8}$ in.

a few garbage bones and oystershells had been spread around the site in the course of the bulldozing. Bones from the pits comprised the usual range of ox, pig, and deer remains that are to be found amid the garbage of most colonial sites. A group of the less readily identifiable bones were submitted to the Smithsonian Institution for examination and the following identifications were provided:

Left humerus, wild duck, (white-winged scoter, *Melanitta deglandi*). From T.N. 17.

Fibula of pig (*Sus scrofa*), domestic. From T.N. 17.

Shaft of humerus, domestic goose. From T.N. 22.

Mandible of possum (*Didelphis* sp. *marsupialis*, subsp. *virginiana*), edible. From T.N. 22.

Mandible of "marine gar," or needlefish, of the Belonidae family, probably *Strongylura marina* (Walbaum), a very common sea fish in this area, which runs in fresh water, and is frequently eaten. From T.N. 24.

Also submitted for examination were specimens from a number of scallop shells, which were plentiful in Pits C and D, and examples of mussel and clam shells from Pit C. The identifications were as follows:

Fresh water mussel of a type eaten by the Indians, *Elliptio complanatus*. From T.N. 18.

Fossil clam, *Glycymeris* sp. From T.N. 18.

Fossil scallop of a variety no longer living in this area. From T.N. 22.

The identification of the scallop as being fossil was somewhat surprising in view of the prevalence of such shells in Pits C and D. However, it should be noted that Pit E (T.N. 24) contained a fragment of fossil whale rib. Such bones are plentiful in the Tidewater marl beds and are frequently found on the shores of the James and York Rivers.

The Artifacts

TOBACCO PIPES

Pipes (fig. 14) were not plentiful, no more than 100 fragments being found in any one deposit. The datable bowls and fragments of pipes closely followed the site's two periods as indicated by the various refuse pits; that is, examples from Pits A and B date from around 1700–1720, and those from the rest of the pits are of types loosely attributed to the period

of about 1710–1780. On the evidence of association and by the use of the Harrington system of stem-hole dating, there is no reason to date any of the pipes later than the first half of the 18th century.

A few deposits yielded a sufficient number of stem fragments to provide tentative dating, as follows:

Deposit	*No. of fragments*	*Stem diameters*				*Date*
		4/64"	5/64"	6/64"	7/64"	
Pit B (T.N. 30)	91		29%	60%	11%	1700–1720
Pit C (T.N. 17, 18)	82	17%	78%	5%		1730–1750
Pit D (T.N. 23)	49	16%	63%	21%		1730–1740
Kitchen (T.N. 1)	55		57%	43%		1720–1740

It should be noted that in all cases the samplings are too small for accuracy and that they are based on Mr. Harrington's elementary chart which he, himself, claims to be no more than a point of departure for a new approach to the dating of tobacco-pipe fragments. Nevertheless, the above results do follow fairly closely the dating of the groups arrived at on the evidence of stratigraphy and on the study of associated artifacts of all types.

Since this report was first written, Lewis Binford of the University of Chicago has developed a mathematical formula based on Harrington's chart which enables one to arrive at a mean date for the deposition of a group of pipes. Audrey Noël Hume has subsequently demonstrated that a sampling of approximately 900 fragments is needed to maintain consistent results, and that the degree of accuracy rapidly falls off when dealing with groups of pipes dating earlier than 1670 and later than 1760.[61] Fortunately, the Tutter's Neck pipes, though few in number, do fall within the period of greatest accuracy. The following table illustrates the relationships between dates arrived at on the basis of all artifactual and documentary evidence (I), by the use of the Harrington chart (II), and by the Binford formula (III).

Deposit	*I*	*II*	*III*
Pit B (T.N. 30)	1702–1710	1700–1720	1709
Pit C (T.N. 17, 18)	ca. 1740	1735–1750	1745
Pit D (T.N. 23)	1730–1740	1730–1740	1739
Stratum (T.N. 1)	ca. 1740	1720–1740	1724

The discrepancy in the dating of layer T.N. 1 must be explained by the fact that the soil and its contents were dug from somewhere else and redeposited outside the kitchen building. Had this stratum predated the building, it would undoubtedly have been found on both sides of the foundation and would not have overlaid the red clay level (T.N. 2) which was similar and probably identical to that sealing pits C and D, the latter containing a wine bottle of about 1740 (fig. 19, no. 18).

The following maker's marks were found on pipes:

R M — One initial on either side of the heel. Two examples (see fig. 14, no. 3). The initials are not uncommon on pipes of the same shape found at Williamsburg and Rosewell Plantation.[62] There were at least seven pipemakers with these initials working in the late 17th and early 18th centuries.[63] T.N. 30, Pit B.

H S — One initial on either side of the heel. One example (fig. 14, no. 5). Other pipes with these initials have been found at Williamsburg and Rosewell Plantation. Maker not known. T.N. 1.

I S — One initial on either side of the heel. One example (fig. 14, no. 6). The mark is not recorded among previous finds from either Jamestown or Williamsburg. At least five

[61] J. C. Harrington, "Dating Stem Fragments of Seventeenth and Eighteenth Century Clay Tobacco Pipes," *Quarterly Bulletin Archeological Society of Virginia* (September 1954), vol. 9, no. 1, no pagination. Audrey Noël Hume, "Clay Tobacco Pipe Dating in the Light of Recent Excavations," ibid. (December 1963), vol. 18, no. 2, pp. 22–25. Lewis H. Binford, "A New Method of Calculating Dates from Kaolin Pipe Stem Samples," *Southeastern Archeological Newsletter* (June 1962), vol. 9, no. 1, pp. 19–21.

[62] See Ivor Noël Hume, "Excavations at Rosewell, Gloucester County, Virginia, 1957–1959" (paper 18 in *Contributions from the Museum of History and Technology: Papers 12–18*, U.S. National Museum Bulletin 225, by various authors; Washington: Smithsonian Institution, 1963), p. 222, fig. 35, no. 7, and p. 220.

[63] Adrian Oswald, "The Archaeology and Economic History of English Clay Tobacco Pipes," *Journal of the British Archaeological Association* (London, 1960), 3d series, vol. 23, p. 83.

FIGURE 13.—1, IRON SAW FRAGMENTS found under the Tutter's Neck kitchen (T.N. 15); 2–5, iron sickle, padlock, scissors, and dividers, respectively, from various deposits on the site (see figs. 15, 16).

makers with these initials were working in Bristol in the appropriate period. T.N. 17, Pit C.

RICH ARDS AYER — Richard Sayer. Two examples had the name stamped on bases of flat heels; five others had the stamp on the upper sides of stems (see fig. 14, no. 1). All seven stamps occur on glazed pipes of good quality. No previous examples of his pipes have been found at either Jamestown or Williamsburg. Possibly Richard Sayers who is recorded by Oswald as having been working at Newbury in about 1700. T.N. 30, Pit B.

IP ET — This fragmentary stamp on a molded cartouche on the side of a bowl came from a context of about 1730–1740 (T.N. 2) and was presumably made by the Robert Tippet of Bristol who became a freeman in 1713 and whose pipes have been found in Williamsburg contexts dating as late as the mid-18th century.[64]

RICH TYLER — Presumably Richard Tyler, but the last two letters of the surname are unclear. The stamp appears on a stem fragment within an oval of impressed square dots. Oswald lists a Richard Tyker who was working at Bath in about 1700. Stem-hole diameter, 5/64 in. Unstratified.

W — Fragment from base of bowl of pipe with neither heel nor spur, probably similar in shape to no. 4 of figure 14. The first of a pair of initials molded on either side of the base.[65] Stem-hole diameter, 7/64 in. Unstratified.

METAL OBJECTS

Metal items (figs. 15–17) from the site provide a valuable series of common domestic and agricultural objects of a period that has as yet received little study. The majority of the principal items came from a single refuse pit beneath the kitchen (Pit D, T.N. 23)

[64] [illegible]t. (footnote 59).

[65] NOËL HUME, "Excavations at Rosewell," p. 220, footnote 96.

and although deposited in the second quarter of the 18th century they are generally of earlier date. The surprising preponderance of late 17th-century items in this and other contexts tends to support the theory that the house served as a quarter toward the end of its life and that the furnishings, tools, and utensils consequently were already worn and old-fashioned when provided for use by the slaves.

CERAMICS

Like the metal items, the ceramics are predominantly of the late 17th and early 18th century, though frequently found in contexts of the second quarter of the latter century. The quality and variety of the wares is somewhat surprising, the finds including some items that are today of considerable rarity. Notable among them is the saucer in a reversed "Nevers" style that is seemingly without parallel (fig. 18, no. 8), a London delftware "charger" of massive proportions and uncommon design (fig. 18, no. 10), a lead-glazed Staffordshire bowl fragment (see fig. 19, no. 9), and part of a brown-surfaced white stoneware jug that may have come from the factory of John Dwight of Fulham near London.[66]

The majority of the delftwares have the appearance of London manufacture, rather than that of Bristol or Liverpool. As a broad generalization it may be claimed that the former trend in Virginia was characteristic of the 17th century but was reversed in the 18th.

An unusually large percentage of Colono-Indian pottery was present, predominantly in pits dating from the second quarter of the 18th century. The same contexts also yielded a high proportion of lead-glazed earthenware cream pans manufactured at Yorktown, presumably at the factory of William Rogers that may have been operating as early as 1725.[67]

Although all the items found on the Tutter's Neck site emanate from contexts of 18th-century date, most of the delftwares and some of the stoneware items are without parallel in nearby Williamsburg, the 18th-century cultural and economic center of Virginia that lay only three miles away. Once again, therefore, the artifacts point to a 17th-century survival and perhaps, by projection, to a low standard of living.

An indication of a terminal date for the life of the site is provided by the total absence of English white salt-glazed stoneware from all except one stratified deposit (Pit I), a ware that does not seem to have reached the colonies before the third decade of the 18th century,[68] most of it arriving after about 1740. It must be recorded, however, that fragments of this later period were found scattered on the surface, but it was impossible to determine whence they came.

GLASS BOTTLES

Wine bottles[69] provided the key to the entire excavation, first by possessing seals (fig. 6) that identified the owner of the property and secondly by providing dating evidence for the construction of the kitchen; thus there was avoided an error of dating that would otherwise have been inevitable. In addition, the group of bottles from Pit B (T.N. 30) provided a valuable series of specimens of varying shapes, all of which were in use together at the beginning of the 18th century. (See fig. 19, nos. 11–20.)

A few small fragments of green pharmaceutical phials were also recovered, but none was sufficiently large to merit illustration.

TABLE GLASS

Although wine-bottle glass was plentiful, table glass was comparatively scarce. It was confined to the three wineglasses illustrated as nos. 16–18 of figure 17, a 17th-century wineglass-stem fragment similar to no. 17 of figure 17 (see footnote 94), heavy tumbler-base fragments of typical 18th-century type (from T.N. 24, 27), and a fragment from a fine gadrooned Romer of late 17th-century date (fig. 20, no. 8).

Conclusions

The Tutter's Neck excavations represented the partial exploration of a small colonial dwelling and outbuilding, both of which ceased to exist by about

[66] See: J. F. Blacker, *The A B C of English Salt-Glaze Stoneware from Dwight to Doulton* (London: S. Paul & Co., 1922), p. 34ff.; and Ivor Noël Hume, "Bellarmines and Mr. Dwight," *Wine and Spirit Trade Record* (December 1st, 1956), pp. 1628–1632.

[67] C. Malcolm Watkins and Ivor Noël Hume, "The 'Poor Potter' of Yorktown" (paper 54 in *Contributions from the Museum of History and Technology*, U.S. National Museum Bulletin 249, by various authors), Washington: Smithsonian Institution, in press.

[68] The earliest known importation is indicated in *Boston News-Letter* of January 17, 1724 (G. F. Dow, *The Arts and Crafts in New England, 1704–1775*, Topsfield, Massachusetts: The Wayside Press, 1927, p. 82).

[69] The common term "wine bottle" is used here for the sake of convenience, though it should be realized that bottles were not specifically shaped to contain wine but were used for any and all liquids from beer to oil.

1750. On the basis of the excavated artifacts the intensity of occupation seems to fall into two periods, the decade of about 1701–1710 and within the years about 1730–1740. Documentary evidence indicates that these periods relate to the respective ownerships of Frederick Jones and Thomas Bray.

While the groups of artifacts from refuse pits are closely dated by context and are consequently valuable in the general study of domestic life in early 18th-century Virginia, the history of the site is less well served. The limited nature of the excavation, the loss of the overburden through bulldozing, and the destruction of the James City County court records during the Civil War serve to leave a number of important gaps in the chronology. It is to be hoped that at such time as the new trees have grown up and have been cut there will be archeologists ready and waiting to complete the excavation of this small but historically interesting site.

Illustrations

The illustrated items are confined to those that are sufficiently complete or readily identifiable as to be of value to archeologists, curators, and historians who may find comparable items elsewhere. In the interest of brevity, repetitive or unstratified objects have been omitted, although occasional exceptions have been made in the latter category where it is considered that the objects are of significance to the study of the structures or the possessions of Tutter's Neck residents, whether or not they can be closely dated.

The drawn objects are divided by type and are arranged in chronological order within each group where variations of date are apparent. In most instances the archeological evidence of the date at which the artifacts were deposited in the ground is more accurate than is the overall date range of individual items. Thus the fact that a delftware form that was developed about 1700 continued to be manufactured until about 1740 would give us, in the absence of archeological evidence, a manufacture date of about 1700–1740, but there would be no indication of the length of the object's actual life. On the other hand, the archeological evidence tells only when the object was discarded, and not when it was made. To avoid confusion, the descriptions of the artifacts only indicate the periods in which the [illegible] were first made and/or were most popular, [illegible] only when such dates are clearly at variance with the archeological termini. Each description ends with the Tutter's Neck field number that indicates the source of the item and provides the terminus post quem for its context. Table 1 provides a summary of the foregoing report for use in conjunction with the artifact illustrations.

TABLE 1.—*Location and terminal dates of deposits.*

Field Number (T.N.)	*Deposit*	*Terminal Date*
1	Kitchen	c. 1740
2	"	c. 1730–1740
3	"	c. 1730–1740
4	"	c. 1740
8	kitchen vicinity	Unstratified
10	residence	c. 1740–1750
15	kitchen	c. 1740
16	"	c. 1730–1740
17	Pit C	c. 1725–1735
18	" "	c. 1725–1735
19	Pit F	c. 1730–1740
22	kitchen	c. 1730–1740
23	Pit D	c. 1730–1740
24	Pit E	c. 1730–1740
27	residence	c. 1740*ff*1750
28	"	c. 1740–1750
29	slope south of residence	c. 1750–1760
30	Pit B	c. 1702–1710
31	Pit A	c. 1702–1710
32	residence vicinity	Unstratified

FIGURE 14. TOBACCO-PIPE PROFILES

1. Pipe with bowl shape reminiscent of the 17th century but with the lip horizontal instead of sloping away from the stem as characteristic of the earlier forms. Mouth somewhat oval; spur small; the clay very white and glazed. Marked on the stem with the name Richard Sayer. Stem-hole diameter $\frac{6}{64}$ in. Oswald Type 9d.[70] T.N. 30.
2. Fragmentary bowl of cylindrical form, having a shallow heel from which the fore-edge of the bowl springs forward. This is a late 17th-century form. No mark. Stem-hole diameter $\frac{6}{64}$ in. T.N. 30.
3. Bowl of basic 18th-century form, but the narrow profile is indicative of an early date within the

[70] ADRIAN OSWALD, "English Clay Tobacco Pipes," *Archeological News Letter* (April 1951), vol. 3, no. 10, p. 158. The type is attributed to the period about 1700–1750, with the distribution mainly in the southwest of England.

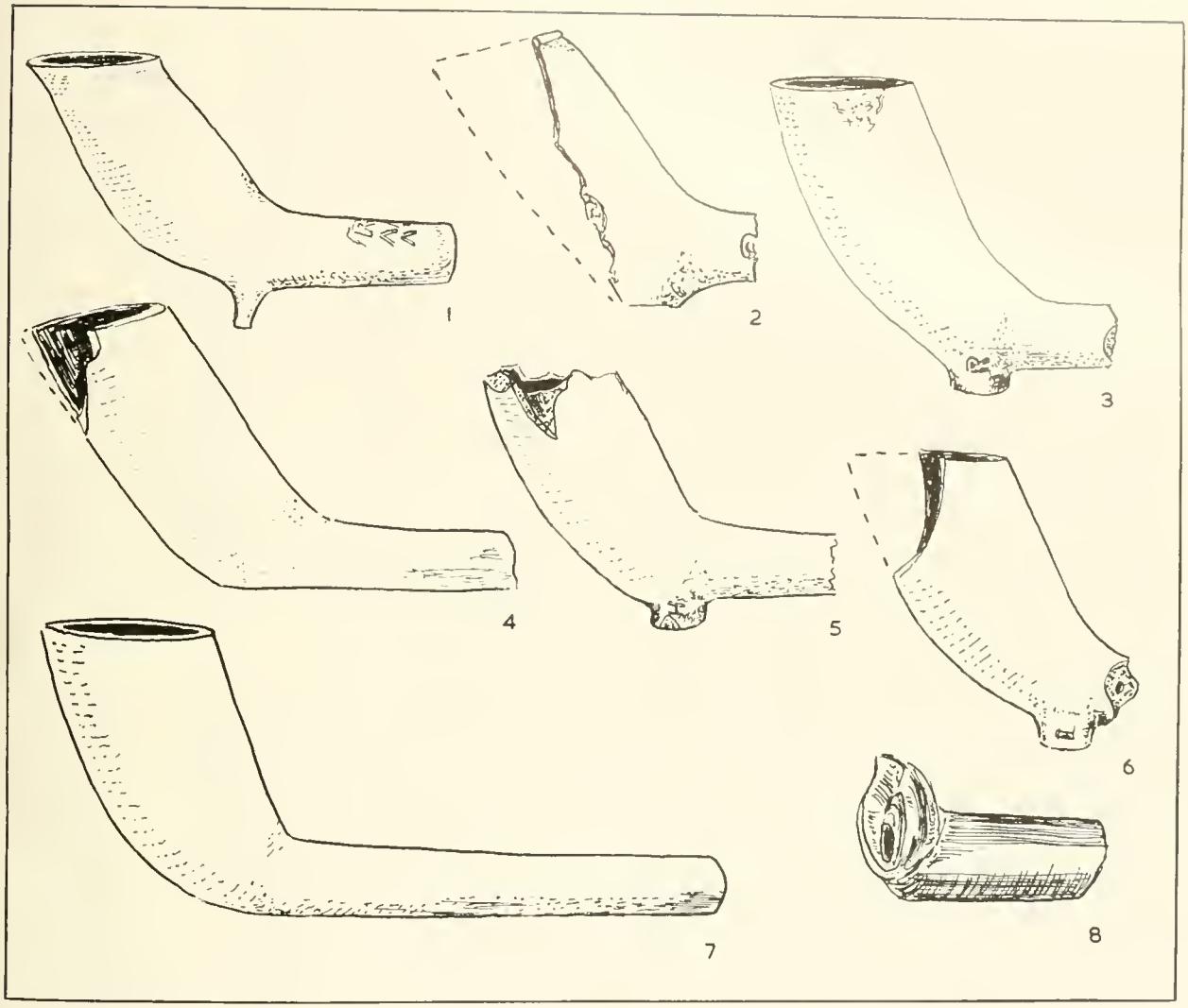

FIGURE 14.—TOBACCO-PIPE PROFILES. Same size.

period. Letters "R M" molded on either side of the heel. Stem-hole diameter $\frac{5}{64}$ in. T.N. 30.

4. Bowl with neither heel nor spur, but the angle of the bowl comparable to that of no. 2. No mark. Stem-hole diameter $\frac{5}{64}$ in. T.N. 31.
5. Bowl apparently similar to no. 3, but with the lip missing; smaller heel with molded initials "HS," but the letters poorly formed and almost illegible. Stem-hole diameter $\frac{6}{64}$ in. T.N. 1.
6. Bowl slightly fatter than the above, initials "IS" clearly molded on the small heel, the "I" very thick. Stem-hole diameter $\frac{4}{64}$ in. T.N. 17.
7. Bowl with neither heel nor spur, an evolved 18th-century form in the style of no. 6 but somewhat larger. This is clearly a later variation of no. 4.[71] Stem-hole diameter $\frac{5}{64}$ in. T.N. 19.
8. Base of bowl and stem fragment, of red clay and of local Virginia manufacture.[72] Apparently a 17th-century form, but found here in an 18th-century context. Stem-hole diameter $\frac{10}{64}$ in. T.N. 18.

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[71] See NOËL HUME, "Excavations at Rosewell," p. 220, footnote 96.

[72] See J. C. HARRINGTON, "Tobacco Pipes from Jamestown," *Quarterly Bulletin Archeological Society of Virginia* (June 1951), vol. 5, no. 4, no pagination.

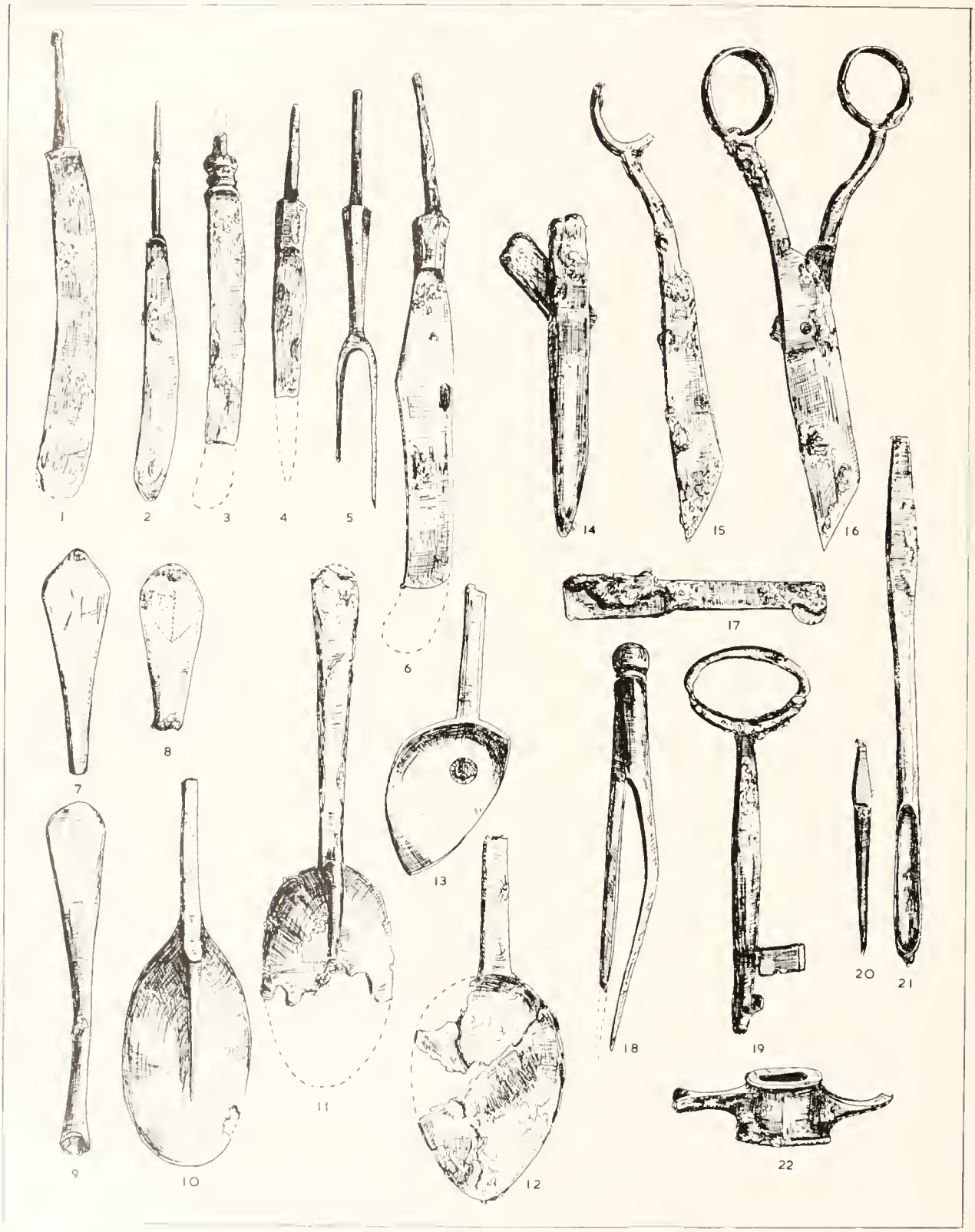

FIGURE 15.— CUTLERY and other small finds. One-half.

FIGURE 15. CUTLERY AND OTHER SMALL FINDS

1. Table knife, iron, with sway-backed and round-ended blade, thin, winglike shoulders, the tang slightly turned over at the end but originally 1½ in. in length. A late 17th-century to early 18th-century blade form.[73] T.N. 23.
2. Table knife, iron, smaller but similar form to no. 1, but with the blade end less rounded. The tang is bent at right angles at approximately its mid-section, a presumably fortuitous feature that has been omitted from the drawing. T.N. 23.
3. Table knife, iron, with incomplete blade and broken tang; the blade narrow and somewhat sway-backed, the shoulders extending into a double collar below a somewhat heavy tang. The closest parallel is believed to have been made around 1700.[74] T.N. 23.
4. Table knife, iron, with the blade much worn and the tip missing, long and heavy shoulders, possibly of octagonal form. This knife is of a form typical of the 17th century.[75] T.N. 23.
5. Table fork, iron, two-tined, with the long octagonal shank common in the 17th century,[76] terminating in a rectangular-sectioned tang. T.N. 10.
6. Table knife, iron, with incomplete blade originally with upswept and rounded end, but seemingly used after the end was lost. Back of blade hipped and terminating in octagonal shoulders and rectangular-sectioned tang. Early 18th century. T.N. 28.
7. Terminal of pewter spoon handle, a weak form of the "split end" or "trifid" terminal of the late 17th century.[77] Scratches on the upper surface can be read as the initials "I H." Early 18th century. T.N. 1.
8. Terminal of pewter spoon handle, spatula form, the handle broad and thin. A broad arrow mark (perhaps a rough, merchant's mark) is rouletted onto the upper surface. On the reverse, an Arabic figure 2, marked in a multiplicity of small scratched arcs, is sufficiently large as to make use of the entire area of the terminal. T.N. 18.
9. Pewter spoon handle, with spatula terminal, in an advanced stage of decay and broken off at the junction with the bowl; probably rat-tailed. T.N. 3.
10. Bowl and broken handle of pewter rat-tail spoon, the rat-tail being unusually long and thin after sharply constricting at the heel of the bowl. The handle is narrow and oval in section and could very well have ended in a terminal section of the same type and length as no. 9. T.N. 23.
11. Pewter spoon, normal rat-tail bowl, apparently with spatula handle terminal. This spoon was intact when found, but was in so advanced a state of decay that the weaker sections at both ends lay powdered in the ground and could not be restored. T.N. 23.
12. Pewter spoon bowl and section of straight handle. Bowl is of oval form with rudimentary rat-tail; the handle is rectangular in section. The handle form is characteristic of the 17th century.[78] The spoon is in an advanced stage of decay but appears to have been crudely formed, the bowl being very shallow. T.N. 17.
13. Latten or brass spoon bowl and section of handle, tinned; the bowl oval but worn away by long use. Maker's mark in the bowl: a spoon flanked by the initials "R S" within two rings between which is the legend "DOVBLE WHITED."[79] The form is typical of the second half of the 17th century. T.N. 23.
14. Blade sections of iron scissors. T.N. 23.
15. Blade and incomplete handle from pair of scissors. The blade terminates at an angle of 30° in the manner of modern tailors' scissors, a shape that was common in the 17th century and less so in the 18th. The loop of the handle takes the

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[73] See J. F. HAYWARD, *English Cutlery* (London: Victoria and Albert Museum handbook, 1956), pp. 15–16, pl. 13b.

[74] Ibid., p. 16, pl. 17c.

[75] For a similar example, see J. PAUL HUDSON, *New Discoveries at Jamestown* (Washington: National Park Service, 1957), p. 34, second knife from bottom.

[76] The 18th-century shanks tend to be bulbous either below the shoulder or at the midsection.

[77] A complete spoon with this type terminal was found in excavations at Green Spring Plantation near Jamestown; see LOUIS R. CAYWOOD, *Excavations at Green Spring Plantation* (Yorktown, Virginia: Colonial National Historical Park, 1955), pl. 11, "G.S. 153." For a Scottish silver spoon with this type terminal see *The Connoisseur* (April 1910), vol. 26, no. 104. and *Catalogue of the Guildhall Museum* (London, 1908), pl. 81, no. 16.

[78] A spoon handle with a shaft of similar type was found at Jamestown. It bears the mark of Joseph Copeland, a pewterer of Chuckatuck, Virginia, in 1675. See JOHN L. COTTER, *Archeological Excavations at Jamestown, Virginia* (Washington: National Park Service, 1958), pl. 87, fig. at right.

[79] See *Catalogue of the Guildhall Museum*, pl. 71, fig. 3 (for bowl shape) and fig. 5 (for mark).

form of a broad but thin-sectioned band set at a right angle to the blade, an early characteristic.[80] T.N. 23.

16. Pair of iron scissors with one blade broken, of similar type to the above. The loop and shaft of the left section are much more substantial than the right, suggesting that although the components were found attached they were not originally made for each other. T.N. 23.
17. Left side of iron casing for a fleam. An example of similar shape and size was found in excavations at Jamestown. T.N. 23.
18. Pair of iron dividers with bulb terminal and tines somewhat convex on the outside faces.[81] T.N. 23.
19. Iron key with round-sectioned loop; stem round-sectioned and narrow at junction with loop and becoming much wider in midsection, then tapering again as it approaches the web. The pin is solid and terminates in a small nipple; the web is divided and much decayed, with the foresection represented by only a small fragment that is much thinner than its companion. It would appear that the key had been violently wrenched in a lock, resulting in the breaking of the web and the twisting and fracturing of the loop. T.N. 23.
20. Small tool of uncertain purpose, perhaps an awl. Broad and flat at one end, in the manner of a screwdriver or drill shank, and becoming round-sectioned and narrowing to a point at the other end. T.N. 30.
21. Iron spoon bit with flattened shank terminal. Spoon convexo-concave in section, saucered upwards at the lower end to the same height as the walls of the trough, and terminating in a worm or twist of two surviving revolutions.[82] T.N. 23.
22. Iron quillon and knuckle bow mounting from sword.[83] T.N. 23.

FIGURE 16. BUILDERS HARDWARE AND OTHER METAL ITEMS

1. An object of uncertain purpose, made from sheet iron rolled at the sides over a wire to provide round-sectioned edges and more roughly folded for the same purpose at the lower edge. The central hole has been deliberately cut. The object, whose shape resembles the terminal from a cheekpiece of a snaffle bit, has been broken at the narrow end, suggesting that it was too light in construction to have been intended for such a purpose. T.N. 19.
2. Tang and part of blade from an iron sickle. Blade is triangular in section, and the cutting edge commences approximately 2½ in. from the haft. T.N. 23.
3. Blade fragment from sickle of larger size than the above, triangular in section, and bearing some indication that the back has been hammered. T.N. 17.
4. Front plate and part of mechanism of bag-shaped padlock. The keyhole cover is now missing but originally it was hinged, and not pivoting as has been common on locks since the second half of the 18th century.[84] The bolt, which survives, is fitted with a spring at the rear and has two wards projecting from its midsection. T.N. 27.
5. Chest or coffin handle, iron. Handhold is ½ in. in width at its widest point and tapers at either end. The terminals, of disk form, serve to hold the handle at right angles to the wood of the chest. Such handles were attached by means of cotter pins. The form was common in the 17th century.[85] T.N. 24.
6. Iron spike of large size, measuring 5⅝ in. in (surviving) length, ½ in. by 7/16 in. at the broken top, and approximately ½ in. by ¼ in. at the bottom. This was the largest spike found on the site. T.N. 22.
7. Iron spike with heavy square head. Length 4¾ in.; shaft at head measures 7/16 in. by 5/16 in. and is spatula-ended. T.N. 23.
8. Ring-headed bolt. Collar beneath the loop, with the shaft round-sectioned and 1 13/16 in. of threading above the pyramidical point. The nut measures approximately ⅞ in. by ⅝ in.[86] T.N. 17.
9. Iron bolt or rivet with large thin head 1¼ in. in

[80] As the 18th century progressed, loops tended to be more round-sectioned. By the end of the colonial period most loops display their greatest width on the same plane as that of the blade. See Noël Hume, "Excavations at Rosewell," p. 198, fig. 21, no. 13.

[81] For a similar example see Hudson, *New Discoveries at Jamestown*, p. 57.

[82] See H. C. Mercer, *Ancient Carpenters' Tools* (Doylestown, Pa.: Bucks County Historical Society, 1951), p. 182.

[83] See Noël Hume, "Excavations at Rosewell," p. 198, fig. 21, no. 14.

[84] Both the baglike shape of the lock and the hinged keyhole cover are indicative of a date in the late 17th century or early 18th century.

[85] Hudson, *New Discoveries at Jamestown*, p. 26.

[86] A similarly headed object, but slotted at the other end to hold a linchpin, was found at Jamestown and considered to be an item of marine hardware. Hudson, *New Discoveries at Jamestown*, p. 85.

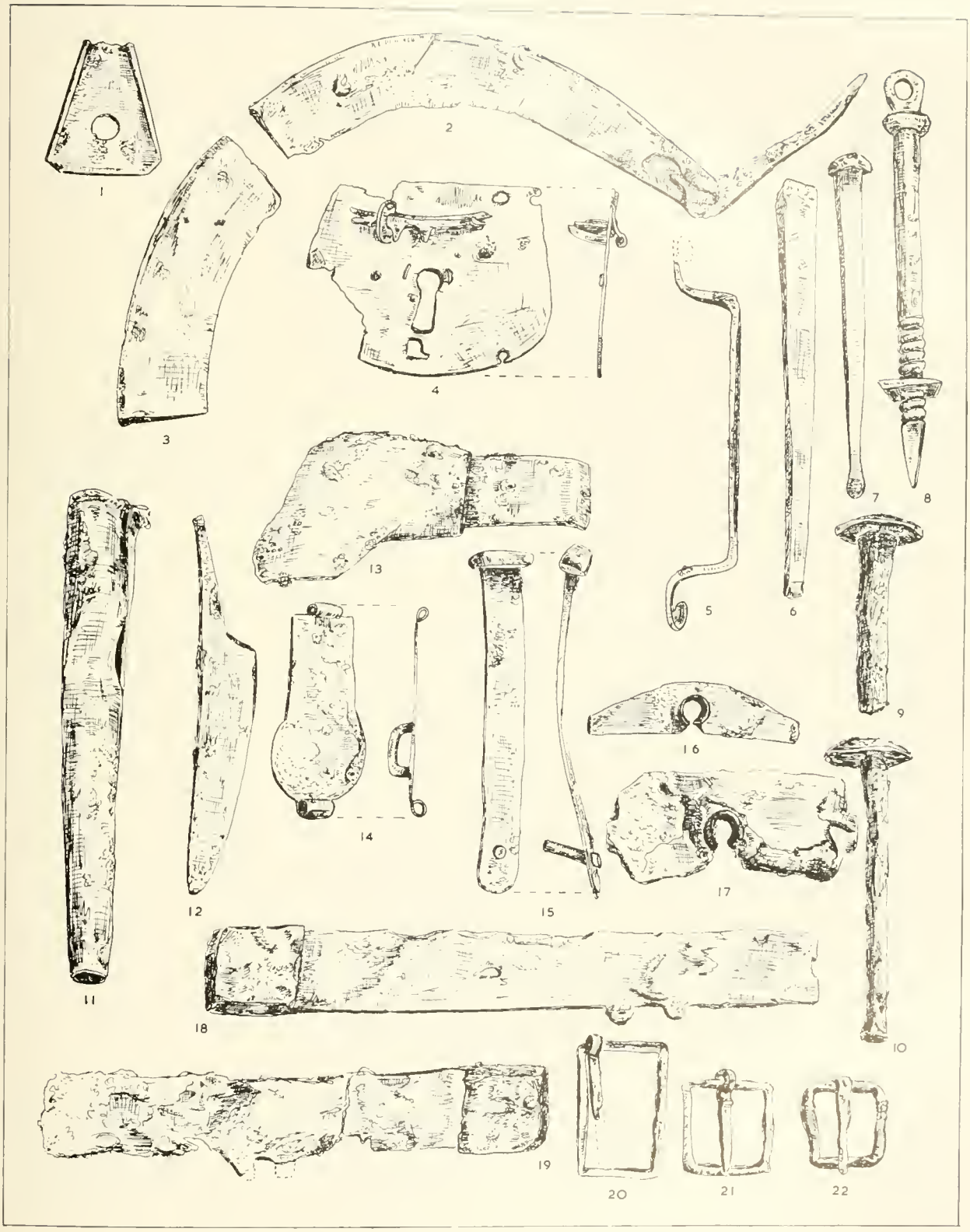

FIGURE 16.—BUILDERS' HARDWARE and other metal items. One-half.

diameter; shaft end probably broken. T.N. 23.

10. Iron rivet with large head approximately rectangular in shape and measuring $1\frac{3}{8}$ in. by $1\frac{3}{16}$ in. Shaft originally round-sectioned but now much decayed and showing evidence of having spread at its flat terminal. T.N. 23.
11. Tube of sheet iron. Wider at one end than the other, having an aperture of $\frac{3}{8}$ in. at the narrow end and approximately $\frac{7}{8}$ in. at the other end. Possibly the nozzle from a pair of bellows or, conceivably, a large ferrule; however, there seem to be no holes for mounting the iron to wood. The object has been hammered at its wide end, causing the metal to spread and roll and the entire object to buckle and yawn at its midsection. T.N. 23.
12. An object of uncertain purpose sometimes described as a door or shutter latch. The blade section is neither pointed nor sharpened, and the shank or tang is slightly spread at the end.[87] T.N. 18.
13. Fragment of object of uncertain purpose. Sheet iron is folded over at one edge to grip an iron strap, only a small section of which survives. T.N. 23.
14. Iron hasp from trunk or chest lock; has rectangular keeper and rolled terminal for lifting.[88] T.N. 18.
15. Iron strap with rectangular T-shaped terminal at one end and pierced by a $\frac{5}{8}$ in. rivet at the other end; of uncertain purpose. T.N. 23.
16. Ward plate, possibly from large padlock, iron. T.N. 22.
17. Ward plate from large rimlock. Lugs at either end serve as rivets that pass through iron supports extending back from the front plate. T.N. 17.
18. Bolt, iron, from large rimlock. The head is approximately $\frac{1}{2}$ in. thick. Two wards extending from the shaft show that, to lock, the bolt moved from right to left. Unstratified.
19. Bolt, iron, from large rimlock. The head is approximately $\frac{1}{2}$ in. thick. The remains of two wards extend from the shaft and show that, to lock, the bolt moved from left to right. T.N. 18.
20. Harness buckle, iron. Almost square-sectioned, with the tang round-sectioned, flattened at the top, and rolled around the buckle. T.N. 16.
21. Harness buckle, iron. The tang side is round-sectioned, the other sides flattened. The tang is pointed, square-sectioned in the shaft, and possesses an ornamental ridge below the point at which it rolls over the frame.[89] T.N. 23.
22. Harness buckle, iron, much decayed. Frame and tang apparently square-sectioned, the former perhaps unintentionally constricted at one side. T.N. 23.

[87] For similar example see Noël Hume, "Excavations at Rosewell," p. 224, no. 8.

[88] For similar example see Hudson, *New Discoveries at Jamestown*, p. 30, fig. at top left.

FIGURE 17. OBJECTS OF IRON, BRASS, BONE, AND GLASS

1. Ring, iron, with evidence of wear at one side; possibly a handle or a chain terminal. T.N. 23.
2. Loop, iron, with the ends perhaps originally meeting; possibly a handle or a chain terminal. T.N. 19.
3. Horseshoe, iron. Rudimentary keyhold type, much decayed but with slight traces of fullering, probably eight nail holes, four on each side. The lug at left terminal would seem to have been created by the loss of a fragment of the outer edge. This is a typical 17th-century form, but one that continued into the 18th century.[90] T.N. 24.
4. Handle from scythe, iron. The wooden shaft was approximately $1\frac{5}{8}$ in. in diameter at point of contact. T.N. 24.
5. Part of snaffle bit, jointed mouthpiece lozenge-shaped junction of bit and rein loop. T.N. 23.
6. Fragment of iron pot, with two molded cordons on the body. T.N. 30.
7. Leg from iron pot, five-sided and tapering to a point.[91] Base of pot approximately $\frac{1}{8}$ in. thick. T.N. 8.
8. Leg with trifid or cloven foot, from iron pot. Legs of this type narrow above the foot and spread again towards the point of junction with the pot base. It was at the narrow midsection that the illustrated leg broke. The form was common in the 17th century. T.N. 18.
9. Tapering iron strap of uncertain purpose. Two small nail holes at the broad end and two larger holes down the length of strap. T.N. 19.

[89] Another example with similar frame, but with a broader tang and no ornamental ridge, was found in the same context.

[90] See Noël Hume, "Excavations at Rosewell," p. 224, no. 10, and *Archaeology in Britain* (London: Foyle, 1953), p. 107, fig. 23, no. 17.

[91] It is possible that this leg originally spread out into a foot in the style of no. 6. See Hudson, *New Discoveries at Jamestown*, p. 30, fig. at left.

FIGURE 17.—OBJECTS of iron, brass, bone, and glass. One-half.

10. Strap similar to the above. Slightly constricted at midsection but otherwise without taper; positioning of nail holes as in no. 9. The strap is bent in opposite directions at either end, the bend at the right extremity passing through the line of the nail holes, indicating that the bending occurred when the object was used for a purpose other than that for which it was originally intended. T.N. 23.
11. Shoe buckle, iron. Badly decayed, but traces of both iron tines and back loop remain. The frame sides were probably originally only 3/16 in. to 1/4 in. wide. T.N. 23. Shoe buckles of iron are very rarely encountered.
12. Harness ornament, brass. Originally silver-plated or tin-plated, of shell form; five tangs that protrude from the back—four in the area of the shell and one at the tail—were folded over to grip the leather, fragments of which still survived when the fitting was found. The form was common in the 18th century,[92] but most examples found in Virginia are much less angular than is this example. T.N. 17.
13. Harness fitting, brass, with rectangular loop at right angles to the ornamental plate, probably a strap retainer. T.N. 15.
14. Bone tube or nozzle, possibly part of a syringe. Internal bore spreads from 1/8 in. at the narrow, broken end, to 3/8 in. at the other end. The increase in bore begins at a point 3/4 in. from the wide end. The latter terminates on the exterior in a collar above six encircling grooves, below which the tube is trumpet-shaped and ornamented with two shallow incised rings. T.N. 17.
15. Bone tube of uncertain purpose. Trimmed at the narrow end to fit within a collar or extension; the wider end spreading and convex, the interior of this end with spiral groove to create threading to house a screw-ended plug or extension. T.N. 17.
16. Wineglass stem. Heavy and solid inverted baluster with small fortuitous tear; the lead metal a smoky gray with an almost frosted appearance resulting from surface decay.[93] The bowl, though large, was comparatively thin at its junction with the stem and probably, therefore, was of funnel form. Late 17th century. T.N. 22.
17. Light wineglass. Pale straw-colored metal;[94] inverted baluster stem is hollow and gently tooled into quatrefoil form at its junction with the bowl,[95] the latter setting firmly into the top of the stem. The conical foot with central pontil mark is thin and was undoubtedly folded. This is an important 3-piece glass of a type sometimes attributed to Hawley Bishop, George Ravenscroft's successor at the Henley-on-Thames glasshouse.[96] About 1680–1700. T.N. 30.
18. Wineglass stem. Sparkling lead metal; the stem comprising a solid, inverted baluster beneath a massive cushion knop, the base of the bowl nestling firmly within the latter. Late 17th century to early 18th century.[97] T.N. 4.

FIGURE 18

ENGLISH DELFTWARE

1. Bowl with everted rim ornamented with crudely overlapping ovals and diamonds in blue; interior of bowl decorated with rings of the same color. The conjectural base and foot are derived from larger bowls of similar form found in excavations at Williamsburg. The glaze is thick, and very white. Late 17th century to early 18th century. T.N. 30.
2. Rim sherd from bowl of form similar to the above, but the blue decoration on the interior of the bowl and the rim plain. T.N. 23.
3. Hemispherical bowl. The foot conjectural, decorated in blue on the exterior with a stylized foliate border made up almost entirely from groups of straight lines. There is a trellis border above the missing foot, and the interior is decorated with a double blue line at the same height, and with a single line 5/8 in. below the rim. This last is decorated with red, imitating the red-brown slipped line that frequently occurs on Chinese export

[92] For similar examples, see Noël Hume, "Excavations at Rosewell," p. 200, fig. 22, nos. 6, 7.

[93] For a parallel of the stem form only, see George Bernard Hughes, *English, Scottish and Irish Table Glass from the Sixteenth Century to 1820* (London: Batsford, 1956), fig. 35, no. 1. A rather similar baluster shape, about 1695, is shown in E. M. Elville, "Starting a Collection of Glass," *Country Life* (June 11, 1959), vol. 125, no. 3256, p. 1329, fig. 1. A tavern glass, attributed to the period 1685–1690, whose baluster has a large tear, but which otherwise is a good parallel, is shown in *The Antique Dealer and Collector's Guide* (April 1954), p. 29, fig. at left.

[94] The metal was tested for lead with positive results.

[95] A slightly larger stem from a glass of similar form was found outside the kitchen in deposit T.N. 1; not illustrated.

[96] For a glass of comparable form, but of soda metal, see G. B. Hughes, "Old English Ale Glasses," *Wine and Spirit Trade Record* (April 15, 1954), p. 428 and fig. 1.

[97] For a similar stem shape attributed to the last decade of the 17th century see A. Hartshorne, *Old English Glasses* (London, 1897), p. 245, pl. 34.

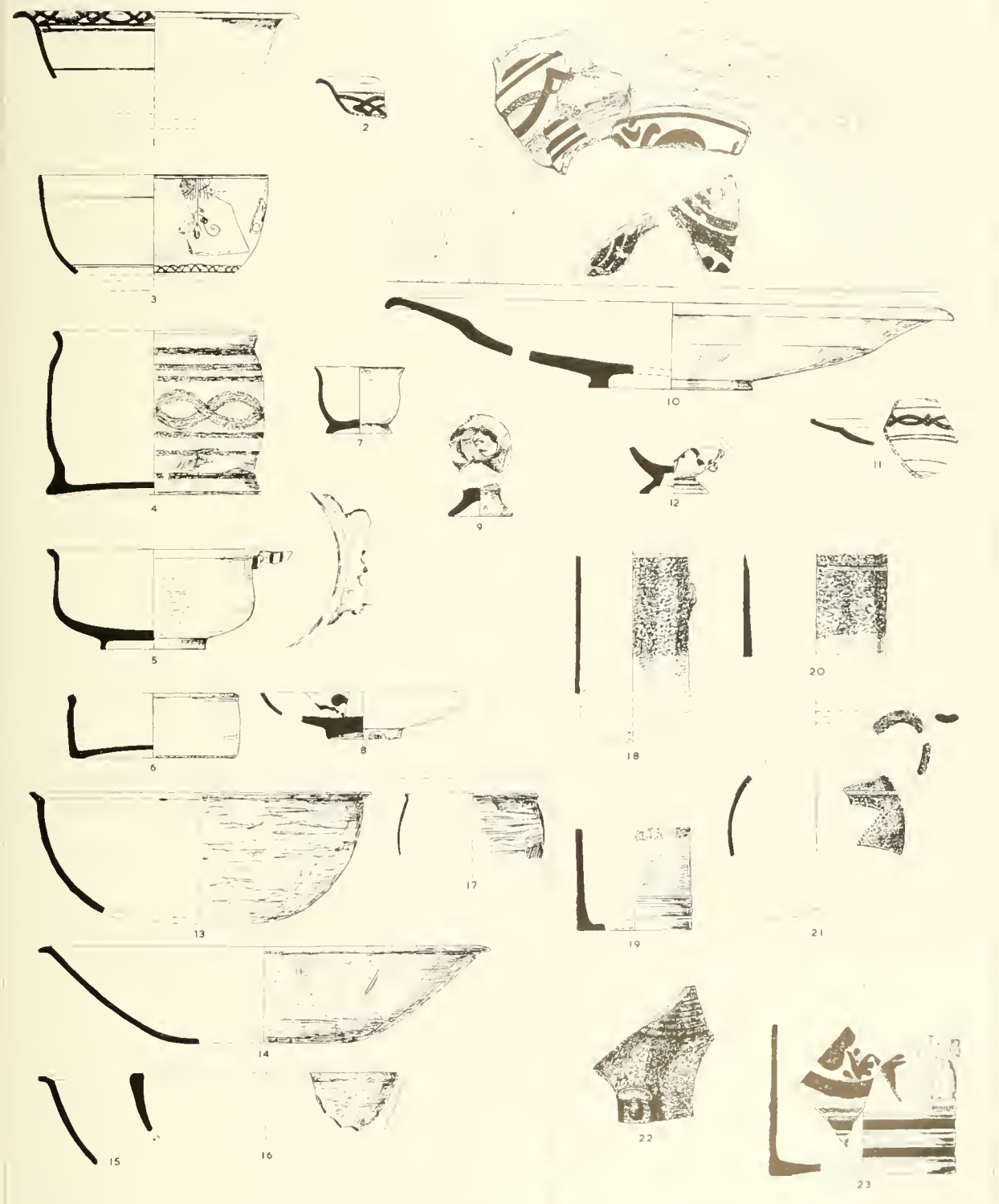

FIGURE 18.—ENGLISH DELFTWARE, Indian pottery, and stonewares. One-fourth.

porcelain. Second quarter of 18th century. T.N. 17; one sherd from T.N. 16.

4. Drug jar. Flat and slightly everted rim, straight body section, and spreading base; the bottom slightly domed and the glaze thin. Ornamented in pale blue with groups of horizontal lines and a body zone decorated with linked ovals created by the drawing of two overlapping wavy lines. Probably of London manufacture and of 17th-century date.[98] T.N. 30.
5. Porringer. Slightly everted rim and handle with heart-shaped aperture; body slightly bulbous and incurving to a straight foot; the glaze thick and gray. Probably of London manufacture.[99] Late 17th century to early 18th century. T.N. 23.
6. Shallow ointment pot or jar. Rim flattened, undercut, and slightly everted; base markedly domed, thick pinkish-white glaze. Almost certainly of London manufacture and dating from latter part of 17th century. T.N. 30.
7. Ointment pot. Thin, slightly everted rim over a bulbous body; the foot slightly spreading beneath it and slightly conical beneath; the glaze thick and gray. 18th century. T.N. 23.
8. Saucer. Conjectural reconstruction derived from base and rim sherds. The base thick; the foot solid and only slightly raised, but the rim thin and with a much more even finish. The piece has a thick white glaze with a slight pink cast and is haphazardly splashed with blue. The technique would appear to be the reverse of the London copies of Nevers faïence whereon white dots are splashed over a blue ground.[100] This object appears to be without parallel in published sources, but may tentatively be given the same dating as the London white on blue, i.e., about 1680–1690.[101] T.N. 30.
9. Pedestal base from a small salt. Base conical within; glaze thick and very white; bowl decorated internally with profile portrait of a cavalier. This extremely unusual item was, by a remarkable coincidence, paralleled by an identical fragment found by the writer on the foreshore of the River Thames at Queenhithe in London. The two are shown together in figure 11. About 1660–1680.[102] T.N. 23.
10. Large dish or charger reconstructed on the basis of base and rim fragments. Diameter approximately 1 ft. 3 in. The rim turns gently downward beyond the wide marly, and the foot is squat and slightly spread. The glaze is thick and white, and the rim decoration takes the form of broad rings of blue enclosing a marly zone ornamented with an alternating lozenge and diamond motif created from two rows of interlocking arcs, the upper painted in orange and the lower in blue. The decoration of the center of the dish is uncertain, but was painted in the same two colors, perhaps in a stylized pomegranate design. Such dishes are frequently decorated on the rim edges with dashes of blue that give them the name "blue dash chargers,"[103] but there is sufficient glaze surviving on this example to indicate that there was no such ornament. Another somewhat unusual feature is that the back of the dish is tin-glazed; the majority of such dishes were coated on the reverse with a thin yellow or yellowish-green lead glaze. Such dishes were frequently used as wall or dresser ornaments and not for use at table; consequently, the footrings are generally pierced for suspension. No suspension holes occur on the small sections of the footring that survive on this example. The dish is believed to be of London manufacture on the evidence of wasters found in the Borough of Southwark,[104] London (see fig. 10), though the style is clearly of Dutch origin.[105]

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[98] The association of color and style of decoration coupled with the relationship of diameter to height as displayed here is generally indicative of early date. In the 18th century, jars of this diameter tended to be taller, less spread at the base, and with the blue decoration much darker.

[99] Waste products from London delftware kilns were used to build up the north foreshore of the River Thames between Queenhithe and Dowgate in the City of London. Among the many fragments recovered from this source were biscuit porringer handles of a type similar to the Tutter's Neck example. The manner in which the rim is folded over the handle seems to be a London characteristic, Bristol examples more often being luted straight to the rim. The Thames material was deposited in the late 17th century and probably came from a pottery on the Bankside on the south side of the river.

[100] A very small porringer rim sherd of this ware was found at Tutter's Neck in context T.N. 24; not illustrated.

[101] See Garner, *English Delftware*, p. 15, fig. 30a.

[102] Dating based on the Carolian appearance of the figure.

[103] E. A. Dowman, *Blue Dash Chargers and other Early English Tin Enamel Circular Dishes* (London: T. Werner Laurie Ltd., 1919).

[104] From a kiln site found during building operations for Hay's Wharf between Toolley Street and Pickelherring Street in 1958.

[105] See Ernst Grohne, *Tongefässe in Bremen seit dem Mittelalter* (Bremen: Arthur Geist, 1949), p. 120, Abb. 78, Abb. 80a.

About 1670–1690. T.N. 30.[106]

11. Rim fragment from plate. The glaze slightly pink, narrow marly decorated with alternating lozenge and diamond motif in light blue (see no. 10) bordered by a single and double line of the same color. At least two concentric circles adorned the floor of the plate, but no evidence of the central design survives. Early 18th century. T.N. 23.
12. Pedestal foot and base of salt or cup. The foot conical and shelved internally; the bowl flat-based and with the rolled terminal of a small handle at one side; the glaze somewhat gray. The foot decorated with three somewhat irregularly drawn rings in light blue; the bowl ornamented with rudimentary floral devices; and the handle terminal decorated with two horizontal bars of dark blue, perhaps beneath a vertical, stalked flower. Late 17th century(?). T.N. 24.

INDIAN POTTERY

13. Bowl with flattened and slightly everted rim. Colono-Indian [107] pottery, pebble- or stick-burnished, with pink surface; extensive tool marks on the exterior; the ware flecked with red ocher and few traces of shell. T.N. 23, T.N. 24.[108]
14. Shallow bowl or pan with flattened and everted rim. Colono-Indian pottery; the ware buff and heavily shell-tempered and retaining traces of surface burnishing. T.N. 23.
15. Rim and wall fragment of bowl with roughly flattened and everted rim. Colono-Indian pottery, the body pale buff and finely shell-tempered. T.N. 19.
16. Rim sherd from bowl of local Indian pottery. Lip thickened and slightly incurving; body pink to buff and coarsely shell-tempered; the exterior stick-burnished. T.N. 19.
17. Rim and wall fragment of cup or small bowl, the rim slightly everted by tooling beneath it. Colono-Indian pottery; body pinkish buff with traces of red ocher in the clay; exterior surface highly burnished. It is possible that the fragment came from a vessel comparable to that shown in figure 12, which was found in excavations at Williamsburg.[109] T.N. 23.

BROWN SALT-GLAZED STONEWARES

18. Body and handle terminal fragments from pint (?) tankard. Mottled purplish-brown exterior and reddish-brown interior; the rim conjectural and the lower body and basal section modeled on no. 19. Probably of English manufacture, London or Bristol.[110] T.N. 1, T.N. 4.
19. Basal and wall fragments of pint (?) tankard. Similar in form to the above. Two fragments present, one with the beginning of the red slip that becomes mottled brown in firing, a feature that normally extends from the midsection upwards to the rim. The lower body is gray, as is the interior; the foot is ornamented with a ridge, cordon, and double ridge. T.N. 17.
20. Rim sherd of quart (?) tankard. Burnt; the rim thinned from the inside and ornamented on the outside with a single groove; dark purplish-brown mottling on the exterior, a little of the slip from which extends over the interior of the rim. T.N. 23.
21. Jug or drinking pot. Bulbous body with good quality tooling at the shoulder; handle with single groove down the spine; the base and neck conjectural, but modeled after the forms produced by Dwight of Fulham in the late 17th century.[111] The ware is a pale gray and appears white beneath the internal salt glaze. It is possible that this is an example of the use of the white salt-glazed body conceived by Dwight, and that it may have come from his factory. The refined clay enables the ware to be thinly and finely potted. T.N. 1.
22. Neck, shoulder, and handle-terminal fragments

[106] The smaller base fragment was found in stratum T.N. 17, a much later context than the rest. If this fragment does come from the same dish, it must be assumed that the fragments were scattered and that the sherd was moved in fill dug from an earlier deposit.

[107] A name coined to describe pottery made by the Pamunkey Indians and others in the 18th century that was copied from English forms and sold to the colonists, presumably for use by those who could not afford European wares. See IVOR NOËL HUME, "An Indian Wave of the Colonial Period," *Quarterly Bulletin of the Archeological Society of Virginia* (September 1962), vol. 17, no. 1, pp. 2–14.

[108] The bowl was important in that the presence of its fragments deep in both T.N. 23 and T.N. 24 indicated that both Pits D and E were filled at approximately the same time.

[109] Colonial Williamsburg archeological collection, 10C 58 10B.

[110] Brown stonewares similar to those commonly attributed to Fulham, but more correctly called London, were manufactured at Yorktown by William Rogers in the second quarter of the 18th century. See footnote 67.

[111] A comparable vessel, ornamented with medallion containing Tudor rose and initials of Charles II, is illustrated in BLACKER, *The A B C of English Salt-Glaze Stoneware*, p. 35.

of jug. The neck ornamented with multiple grooving; the handle terminal pressed into the body with one finger; the glaze a rich purplish brown, reddish brown inside.[112] A common form manufactured in London at the close of the 17th century and made elsewhere, including Yorktown, certainly through the second quarter of the 18th century.[113] T.N. 23.

GERMAN SALT-GLAZED STONEWARE

23. Large (Westerwald) tankard, base and lower body sherds only. Stylized foliate and geometric ornament incised and filled with cobalt on an extremely pale-gray body; multiple cordons and grooves above the base; two concave bands filled with blue; the base slightly rising and scored with haphazard lines before firing. T.N. 23.

FIGURE 19

COARSE EARTHENWARES

1. Cream pan of Yorktown (?) earthenware.[114] The rim rolled; spout conjectural, based on others from the same group; base slightly rising; exterior of body above base displaying potting rings and knife work; body containing small quantities of quartz grit, pink-cored and yellow at the edges; exterior unglazed but orange-pink slipped, and the interior lead-glazed a ginger brown mottled with iron. T.N. 24.
2. Cream pan. The rim thickened, incurving and undercut; ware as of no. 1, but the internal glaze a darker brown; approximate diameter, 14 in. T.N. 18.
3. Cream pan. Similar to no. 1 but with spout (from which the above was copied), and the exterior slip somewhat more orange in color. T.N. 23.
4. Cream pan. With spout and rolled rim; the ware red-bodied, flecked with quartz grit and red ocher; exterior a deep red to black; internal glaze a dark greenish brown; approximate diameter, 14¾ in. T.N. 23.
5. Cream pan. The rim thickened, incurving, and undercut; body pale buff; exterior with pale-orange slip; internal glaze a lustrous purple, presumably somewhat overfired. Fragments with this colored glaze are among the many possible wasters from Yorktown. Diameter approximately 14 in. T.N. 23.
6. Cream pan. Unusual, shouldered rim sherd, perhaps intended to take a cover; red body with ginger-brown glaze; probably English. T.N. 4.
7. Storage jar, body fragments only. Decorated with medial grooves and applied trails pressed in piecrust style beneath the missing rim; the body gray-cored and red at the edges, coated with a light-brown glaze flecked here and there with pale green. Presumably English. T.N. 30.
8. Rim fragment from small cup or pot. Hard yellow body coated with a pale treacly glaze. Probably Staffordshire. T.N. 18.
9. Large cylindrical jar or bowl. The wall vertical, undercut above the slightly spread foot. Hard yellow body as above, coated with thick treacly and streaky brown glaze of a color much later often associated with Bennington. A rim sherd from the same deposit is slightly everted, but since the glaze is much lighter the piece may not belong to the same vessel. Base diameter approximately 10½ in. Probably Staffordshire. An example recently purchased by Colonial Williamsburg (fig. 9) is dated 1721. T.N. 30.
10. Storage jar. The rim everted and ridged internally, probably to seat a lid; gravel tempered, pale-pink earthenware; internal dark apple-green glaze.[115] West of England manufacture. T.N. 30.

GLASS BOTTLES

11. Wine bottle of early short-necked form. Olive-green metal; flat string-rim; the mouth everted over rim. About 1680–1700. T.N. 30.
12. Wine bottle with squat body, short and broad neck, and roughly applied string-rim; olive-green metal. The body type may normally be dated around 1700, but some examples are 10 or 15 years earlier.[116] T.N. 30.
13. Wine bottle of olive-green metal. Squatter than the above, but the neck somewhat taller and the

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[112] A similar example from a context of 1763–1772 is illustrated by Noel Hume, "Excavations at Rosewell," fig. 29, no. 1.

[113] Adrian Oswald, "A London Stoneware Pottery, Recent Excavations at Bankside," *The Connoisseur* (January 1951), vol. 126, no. 519, pp. 183–185.

[114] Op. cit. (footnote 67).

[115] A close parallel that was found at Lewes, Delaware, is illustrated in Watkins, "North Devon Pottery," p. 45, fig. 25.

[116] See Sheelah Ruggles-Brise, *Sealed Bottles* (London: Country Life, 1949), pl. 4, fig. at lower left, and W. A. Thorpe, "The Evolution of the Decanter," *The Connoisseur* (April 1929), vol. 83, no. 332, p. 197, fig. 2.

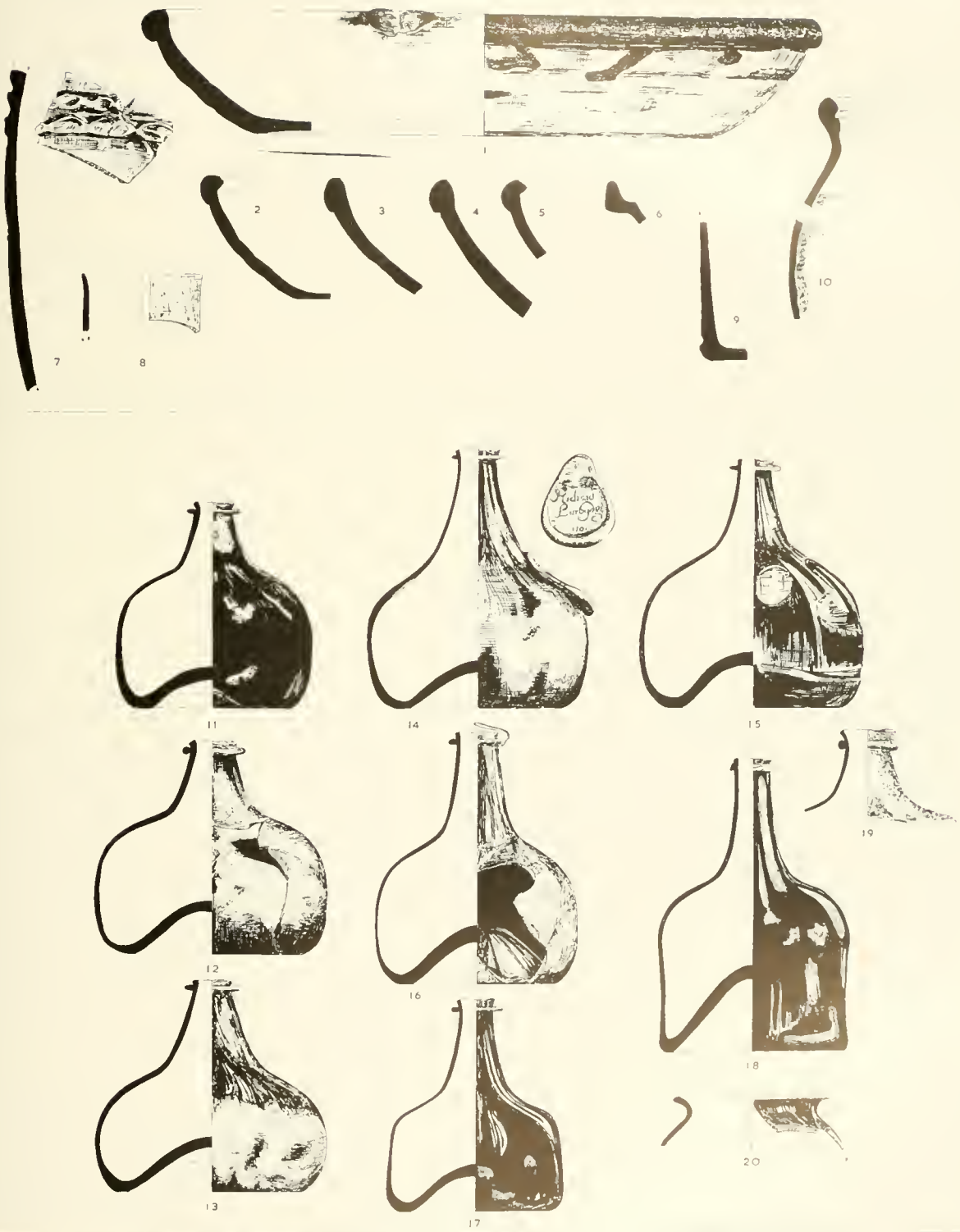

FIGURE 19.—Coarse earthenwares and glass bottles. One-fourth.

shoulder less angular; probably little variation in date.[117] T.N. 30.

14. Wine bottle of squat form, olive-green metal. The neck taller than in no. 12 and the string-rim smaller and V-shaped.[118] Seal, on the shoulder, bears the legend "Richard Burbydge 1701." T.N. 30.
15. Wine bottle of squat form, olive-green metal. Somewhat bulbous and the shoulder weak, the string-rim broad and flat.[119] A slightly earlier form than no. 14. The bottle has a seal on its shoulder with the initials "F F" (Frederick Jones) stamped from a single matrix.[120] T.N. 30.
16. Wine bottle of somewhat unusual form. The metal thin olive green has turned black through decay which has almost entirely destroyed the metal. The body round-shouldered, and bulbous in the early manner; but the neck tall and the string-rim almost round-sectioned rather than V-shaped as one might expect of a bottle of this basic form. Were it not for the soft curve of the body and the shape of the string-rim this bottle might be attributed to the third decade of the 18th century. Note brass wire, still attached to neck, that held cork in place. T.N. 30.
17. Wine bottle of half-bottle size. The metal as in no. 16; shoulder angular; neck somewhat writhen with a broad and flat string-rim of 17th-century character. Without the last feature (and its context) this bottle might be thought to date as late as 1725. T.N. 30.
18. Wine bottle, olive-green metal. Short cylindrical body with conical basal kick, straight neck, and down-tooled string-rim. Dated examples occur in the late 1730's, but are more common in the following decade. T.N. 23.
19. Wine-bottle neck of olive-green metal in an advanced state of decay. Wide mouth with everted lip and large round-sectioned string-rim of unusual character. The angular shoulder suggests that the neck comes from a body comparable to that of no. 12. T.N. 31.
20. Pickle jar, everted-mouth fragments only. Olive-green metal in an advanced stage of decay, originally with square body in the manner of the more common case bottles.[121] T.N. 18.

FIGURE 20. MISCELLANEOUS SMALL FINDS

1. Harness ornament, plated brass. (See fig. 17, no. 12.) T.N. 17.
2. Harness fitting, brass. (See fig. 17, no. 13.) T.N. 15.
3. Brass button. Hollow cast; both back and front convex; the back with two molding holes on either side of the flat-sectioned brass loop, which spreads directly from the back without any intermediary shank. Such buttons were common in the second half of the 17th century and the first quarter of the 18th century.[122] Diameter, $\frac{3}{4}$ in. T.N. 23.
4. Brass curtain ring. The shape cast and then roughly filed flat on either side. This method of manufacture is typical of the 17th and 18th centuries. Diameter, 1 in. T.N. 24.
5. Ornamental brass band from shaft or hilt of uncertain form. The band has become flattened and folded, and the condition of the metal precludes regaining its original shape. However, the band is almost certainly a truncated cone, ornamented with a roughly cutout and scored foliate decoration at the narrow end and plated with a thin band of silver at the other end. Length, $1\frac{3}{16}$ in. T.N. 18.
6. Millefiori or chevron bead of yellow and black glass, almost certainly Venetian.[123] The bead is flattened on its pierced axis and has a diameter of $\frac{3}{8}$ in. This example is probably of 17th-century date, but the technique can be traced back to Roman times. T.N. 30.
7. Chinese export porcelain-cup fragment. Deco-

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[117] Another example is illustrated by Noël Hume, "The Glass Wine Bottle," op. cit. (footnote 56), fig. 3, type 3.

[118] Ibid., fig. 3, type 6, illustrates a similar example.

[119] Ibid., fig. 3, type 5, shows another example.

[120] All other Jones seals from T.N. 30 and T.N. 31 were impressed from combinations of single-letter matrices. See fig. 17.

[121] A similar though slightly smaller neck came from T.N. 16, and a square base, probably from an ordinary case bottle, was among the surface finds. Another example is illustrated in Noël Hume, "Excavations at Rosewell," p. 181, fig. 11, no. 13.

[122] Noël Hume, *Archaeology in Britain*, p. 108.

[123] Colorful beads of this character were frequently used as Indian trade goods and are found in Indian graves in Virginia and elsewhere. A long-established legend that beads were manufactured at the Jamestown glasshouse is without archeological evidence. Although many beads have been found on the shores of the James River near Jamestown, there is reason to suppose that all those of European form were imported.

FIGURE 20.—MISCELLANEOUS small finds.

rated in underglaze blue, rough chevron ornament below the rim on the interior. Diameter approximately 3 in. T.N. 23.

8. Lower bowl fragment of lead-glass Romer ornamented with gadrooning or pillar molding. This is undoubtedly the finest glass fragment from the site; it would not have been out of place in the best English household.[124] About 1685. T.N. 30.
9. Indian projectile point of honey-colored quartzite. The edges slightly serated, and the base slightly concave; the tip missing, but total length originally about 43 mm. Holland Type C.[125] T.N. 16.
10. Indian projectile point of red quartzite. Eared or corner-notched variety; original length approximately 45 mm. Holland Type O.[126] This is an unstratified item discovered on the bared clay surface on the promontory of Tutter's Neck overlooking the junction of Tutter's Neck and Kingsmill Creeks.

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[124] See Hughes, *English, Scottish and Irish Table Glass*, p. 195 and fig. 134.

[125] C. G. Holland, "An Analysis of Projectile Points and Large Blades," appendix to Clifford Evans, *A Ceramic Study of Virginia Archeology* (Bureau of American Ethnology Bulletin 160, Washington, 1955), p. 167.

[126] Ibid., p. 171.

U.S. Government Printing Office: 1966

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Contributions from

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Paper 54

THE "POOR POTTER" OF YORKTOWN

C. Malcolm Watkins and *Ivor Noël Hume*

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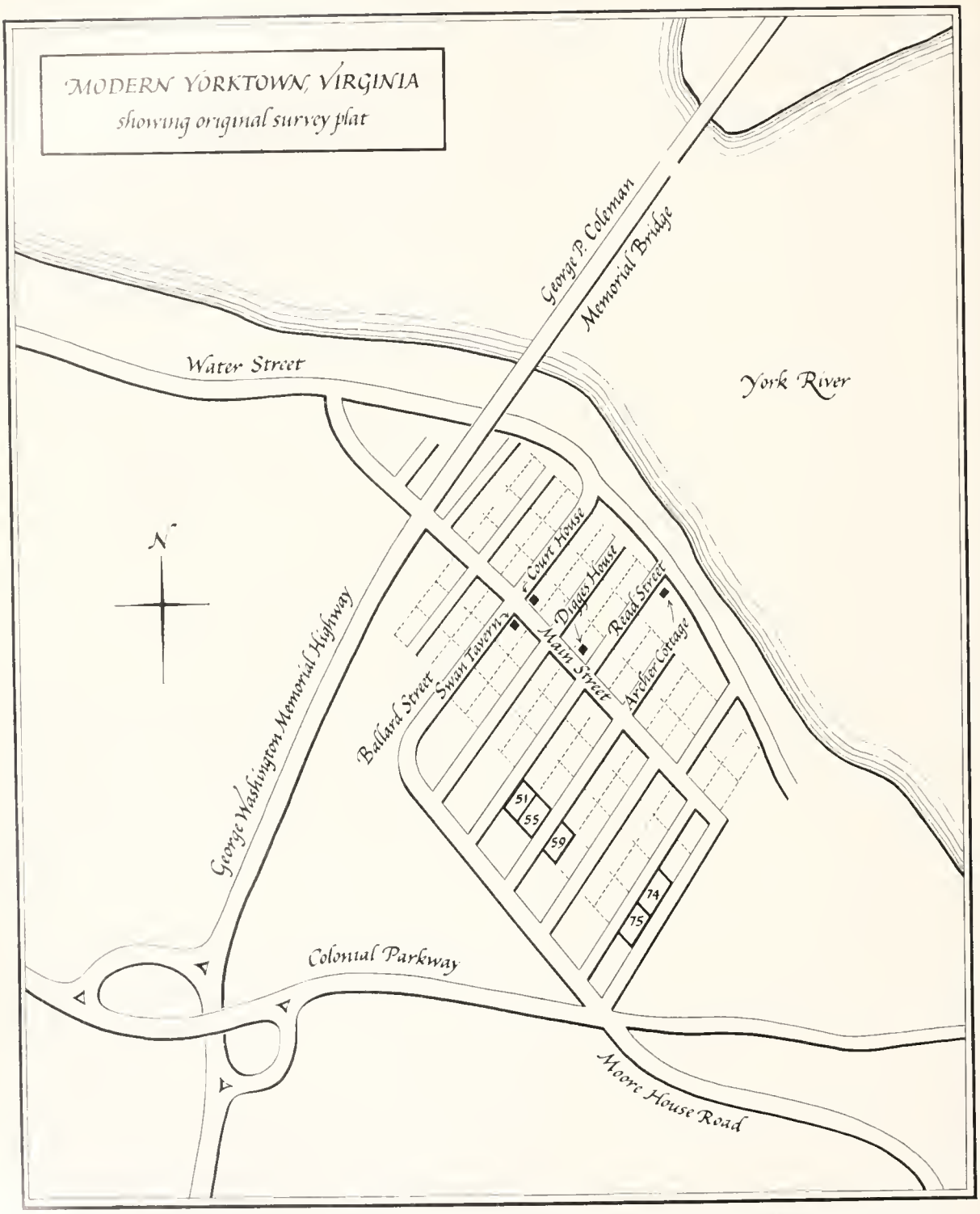

Figure 1.—Modern Yorktown, Virginia, showing original survey plat on which William Rogers' name appears on lots 51 and 55. Additional properties which he acquired are mentioned in his will as lots 59, 74 and 75.

The "Poor Potter" of Yorktown

Pottery making in colonial Virginia, strongly discouraged by a mercantilistic England, seemingly was almost nonexistent according to the Governor's reports which mention but one nameless "poor potter" at Yorktown, whose wares are dismissed as being low in quantity and quality. This paper, the combined effort of a historian and an archeologist, provides evidence that the Yorktown potter was neither poor nor nameless, that his ware was of sufficient quantity and quality to offer competition to English imports, and that official depreciation of his economic importance apparently was deemed politic by the colonial Governor.

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Part I: Documentary Record

C. Malcolm Watkins

In his annual reports on manufactures to the Lords of the Board of Trade during the 1730s, Virginia's royal governor, William Gooch, mentioned several times an anonymous "poor potter" of Yorktown. At face value, Gooch's reports might seem to indicate that manufacturing was an insignificant factor in Virginia's economy and that the only pottery-making endeavor worth mentioning at all was so trivial it could be brushed aside as being almost, if not quite, unworthy of notice. Occasionally, historians have selected one or another of these references to the "poor potter" to support the view either that manufacturing was negligible in colonial Virginia or that ceramic art was limited to the undeveloped skills of a frontier potter.[1] The recent development of archeology, how-

[1] For example: THOMAS JEFFERSON WERTENBAKER, *The Old South, The Founding of American Civilization* (New York: Scribner's, 1942), p. 265; J. PAUL HUDSON, "Earliest Yorktown Pottery," *Antiques* (May 1958), vol. 73, pp. 472–473.

ever, as an adjunct of research in cultural history—especially in the historic areas of Jamestown, Williamsburg, and Yorktown—has produced substantial evidence challenging both the accuracy of Gooch's reports and the conclusions drawn from them, which, contrary to Gooch's statements, proves that pottery making in Yorktown was highly skilled and much at odds with the concept of a "poor potter."

The observation that a remarkably developed ceramic enterprise had been conducted in or near Yorktown was first made by Mr. Noël Hume, the archeologist partner of this paper, in 1956 when he identified fragments of saggers used in firing stoneware, which were excavated in association with numerous stoneware waster sherds and a group of unglazed earthenware sherds of good quality at the site of the Swan Tavern in Yorktown.[2] The question naturally arose, could these expertly made wares have come from the kilns of the "poor potter"? Although ultimate proof is still lacking, identification with him is sufficiently well supported by documentary and artifactual hints that—until further scientific findings are forthcoming—it is presented here as a hypothesis that the "poor potter" did indeed make them. This portion of the paper considers not only the specifics of artifacts and documents, but also the state of manufactures in Virginia before 1750 and their relationship to the character and attitudes of Governor Gooch.

The Crown and Colonial Manufacture

It should be noted that, in general, the history of pottery making in colonial America is fragmentary and inconclusive. Scattered documents bear hints of potters and their activities, and occasional archeological deposits contain the broken sherds and other material evidence of potters' products. Difficulty in obtaining information about early pottery manufacture may be related in large part to a reluctance on the part of the colonists to reveal evidence of manufacturing activity to the Crown authorities. It was the established principle of the Mother Country to integrate the colonial economy into her mercantile system, which was run primarily for her own benefit. As a consequence, there increasingly developed a contest between those who sought to protect English manufactures by discouraging production of colonial goods and those who, in America, tried to enlarge colonial self-sufficiency, the latter inevitably resorting to evasion and suppression of evidence in order to gain their advantage.

The outlines of this struggle are suggested in the laws and official reports relating to colonial manufactures. In Virginia, during the late 17th and early 18th centuries, influential landowners encouraged manufactures as a way to offset the dominance of tobacco in the colony, while several acts were passed in the Virginia Assembly to establish official port towns which, it was thought, would result in flourishing craft communities. Although, for a variety of reasons inherent in Virginia's economy and geography, most of these failed, the acts nonetheless were consistently opposed by the Crown authorities. The 1704 Act for Ports and Towns, for example, was vetoed by the Crown in 1709 for the following reasons:

> The whole Act is designed to Encourage by great Priviledges the settling in Townships, and such settlements will encourage their going on with the Woolen and other Manufactures there. And should this Act be Confirmed, the Establishing of Towns and Incorporating of the Planters as intended thereby, will put them upon further Improvements of the said manufactures, and take them off from the Planting of Tobacco, which would be of very ill consequence, not only in respect to the Exports of our Woolen and other Goods and Consequently to the Dependance that Colony ought to have on this Kingdom, but likewise in respect to the Importation of Tobacco hither for the home and Foreign Consumption, Besides a further Prejudice in relation to our shipping and navigation.[3]

This forthright exposition of official English attitudes reiterated the policy of colonial economic dependence. The wording of the veto—"encourage their *going on* with the Woolen and other Manufactures" and "a *further* Prejudice in relation to our shipping" [italics supplied]—shows that the dangers feared by the Board of Trade regarding the establishment of towns had already become a reality and a threat to English economic policy.

Victor S. Clark, in *The History of Manufactures in*

[2] This material is located in the collection of the Colonial National Historical Park, Jamestown, Virginia.

[3] "Reasons for Repealing the Acts pass'd in Virginia and Maryland relating to Ports and Towns," *Calendar of Virginia State Papers and Other Manuscripts*, edit. William P. Palmer (Richmond, 1875), vol. 1, pp. 137–138.

the United States, points out that the colonists passed so many laws to encourage their own manufactures "that such British intervention as occurred must be regarded rather as indicating the passive disposition of the home government than as defining an administrative policy vigorously carried out."[4] Nevertheless, from 1700 until the Revolution, reports on American manufactures made by royal governors to the Board of Trade demonstrate not only that the Americans were vigorously promoting manufactures but also that they were being evasive and secretive in doing so in the face of official disapproval. The Board of Trade reported in 1733: "It is not improbable that some former governors of our colonies . . . may, in breach of their instructions, have given their concurrence to laws, or have connived for many years at the practice of trades prejudicial to the interest of Great Britain . . . ."[5] Governor Belcher of Massachusetts in his report to the Board of Trade complained that "we cannot conceal from your lordships that it is with the greatest difficulty we are able to procure true informations of the trade and manufactures of New England; which will not appear extraordinary when we acquaint your lordship, that the assembly of the Massachusetts Bay had the boldness to summon . . . Mr. Jeremiah Dunbar [Surveyor General of his Majesty's woods in North America] before them and pass a severe censure upon him, for having given evidence at the bar of the House of Commons of Great Britain with respect to the trade and manufactures of this province . . . ."[6]

After the Port Act of 1701 was disallowed, the Virginians were harder pressed than the northern colonists, who managed to maintain their frowned-upon industries. Ignoring the Virginians' resentment at being limited almost exclusively to the growing of tobacco, additional economic pressures were put upon them. For example, whereas stripped tobacco – the leaves separated from the stalks—had constituted the principal form of exported tobacco, an Act of Parliament was introduced on January 17, 1729, containing clauses prohibiting the importation into England of "Stript Tobacco." John Randolph, Clerk of the Council of Virginia, wrote a letter to Parliament, petitioning the repeal of the clause. By having to export the stalks, he complained, the planters

> are Loaded with the duty and Freight of that which is not only of no Value, but depreciates the pure tobacco at least [illegible] every pound. The Tobacconists are under a temptation to manufacture the Stalk and mingle it with the leaf whereby the Commodity is adulterated, and of course the consumption of it is lessend. And the Merchants are obliged to keep great quantities in their Warehouses, and at last to sell upon long Credit. In consequence of which the price of the Planters Labors, is fallen below what they are able to bear. And unless they can be relieved, they must be driven to a necessity of Employing themselves more usefully in Manufactures of Woollen and Linen, as they are not able under the present circumstances to buy what is Necessary for their Cloathing, in this Kingdom . . . .[7]

Although the usual covering phrase, "other manufactures," was omitted here, it could well have been included. Under such adverse restraints, enterprising Virginians were almost forced to turn to surreptitious manufacturing; perhaps the restraints became excellent excuses for pursuing such manufactures, which, perhaps, were in any case inevitable.

Relief came by 1730 with the passage of a new tobacco act, liberalizing the restrictions on the planters. Meanwhile, in 1727, William Gooch was appointed Lieutenant Governor and, owing in part to his political astuteness and sympathetic awareness of the colonists' difficulties, the lot of the planter was greatly improved. Nevertheless, manufacturing persisted as the colonists increased in strength and numbers. Although official restrictions may have been a perverse encouragement to manufactures, the dynamics of a growing population in a new country predetermined even more an expansion of enterprise. Not only did economic depression force the industrious to turn to manufactures as an alternative to poverty, but economic prosperity, when it occurred in the 1730s, provided a financial stimulus to further that prosperity by means of local manufacturing.

Governor Gooch doubtlessly understood this. He was remarkable among Virginia's colonial governors for his ability to achieve what the colonists wanted while pleasing the home government. His administration created an era of good feeling during which the Virginians frequently expressed their gratitude and praise. In 1728, after serving as Governor for seven

[4] Victor S. Clark, *The History of Manufactures in the United States, 1607–1860* (Washington, D.C.: The Carnegie Institution, 1916), pp. 26–27.

[5] Ibid., p. 203.

[6] Ibid., p. 204.

[7] Library of Congress Transcripts: Great Britain, Public Records Office, Colonial Office 5, vol. 1322, p. 18).

months, he was given £500 by the Assembly as well as an illegal grant by the Council of £300 from the royal quit-rents, which led George Chalmers, an English historian, to comment sourly in 1782 that for this gift "he in return resigned in a great measure, the government to them." [8]

This was not altogether a fair conclusion, for, though Gooch, as Campbell in his *History of Virginia* states, may have been possessed of "some flexibility of principle," [9] he was an extraordinarily successful Governor. Percy S. Flippin concluded that Gooch "was a striking example of what an energetic, forceful royal governor, who was influenced by conditions in the colony and not altogether by his instructions, could accomplish, both for the colony and for the British government." [10] He repeatedly acted in the interests of the colonists, particularly regarding improved tobacco laws. He attended almost every meeting of the Council, whose members constituted the most influential persons in the colony, and thus established a close working relationship and understanding with those who expressed the colonial viewpoint. Quite evidently he understood that prosperity in the colony was a prerequisite to successful trade with England and to a substantial tax return. In respect to improving the tobacco laws, we know that he opposed existing British attitudes; in relation to colonial manufactures beneficial to colonial prosperity, we may assume that he was sympathetic, even though he could not advocate them openly. Certainly, as Campbell stated, "Owing partly to this coalition [between Gooch and the planters], partly to a well-established revenue and a rigid economy, Virginia enjoyed prosperous repose during his long administration." [11]

Gooch's reports on manufactures to the Board of Trade provide an exercise in reading between the lines. They suggest that he was doing his best to support the colonists while observing the letter of the Crown's instructions. They allude to manufactures here and there, but usually in terms that minimize their importance or that brush aside the possibilities of their growth. Yet in his depreciations one senses that while he was trying to state such facts as were necessary, he actually was trying on occasion to create an impression that was at variance with the whole truth. In tracing the Yorktown potter we shall see that this must have been the case.

In his report of 1732 he made a general statement calculated to allow the Lords of the Board of Trade to relax in calm reassurance, while at the same time encouraging their recognition of his wisdom in initiating a new tobacco law:

> There hath been much Discourse amongst the common People of Sowing Flax and Cotton, and therewith supplying themselves with Cloathing: but since the late Tobacco Law hath begun to raise the Price of that Staple, all these projected Schemes are laid aside, and in all probability will Continue so, as long as Tobacco is of any Value, seeing the necessary Cloathing for the Planters and their Negroes, may be more easily Purchas'd with Tobacco than made by themselves. Nor indeed is there much ground to suspect that any kind of Manufactures will prevail in a Country where handycraft Labour is so dear as 'Tis Here; The Heat in Summer, and severe Colds in Winter, accompani'd with sundry Diseases proceeding from these Causes, such as Labouring People in Great Britain undergo, and where the Earth produces enough to purchase and supply all the necessitys of life without the drudgery of much Toil, men are tempted to be lazy.

He then added inconsistently that four ironworks making pots and "Backs for Fireplaces" had been set up in Virginia and admitted that one even included an air furnace. The Lords of the Board of Trade might well have asked how these were accomplished without "the drudgery of much Toil."

He also stated that: "there is one poor Potter's work of course earthen Ware, which is of so little Consequence, that I dare say there hath not been twenty Shilings worth less of that Commodity imported since it was sett up than there was before." [12] It is remarkable that Gooch felt the need to mention the potter at all, since pottery making was usually an anonymous, little-noted craft. Nevertheless, in 1733 he reported again on this seemingly insignificant enterprise:

> As to Manufactures sett up, Wee have at York Town upon York River one poor Potter's Work for Earthen Ware, which is so very inconsiderable that I dare Say

[8] Percy Scott Flippin, "William Gooch: Successful Royal Governor of Virginia," *William & Mary College Quarterly Historical Magazine* (1926), ser. 2, vol. 6, no. 1, pp. 37–38; Flippin, *The Royal Government in Virginia (1624–1775)* (New York: Columbia University Press, 1919), pp. 124 ff.

[9] Charles Campbell, *History of the Colony and Ancient Dominion of Virginia* (Philadelphia, 1810), p. 448.

[10] Flippin (1926), op. cit. (footnote 8), p. 38.

[11] Campbell, op. cit. (footnote 9), p. 414.

[12] Library of Congress Transcripts: Great Britain, Public Record Office, Colonial Office 5, vol. 1323, p. 82.

there has not been forty Shillings' worth less of that Commodity imported since it was Erected than there was before; the poorest Familys being the only Purchasers, who not being able to send to England for such Things would do without them, if they could not gett them Here.[13]

Clearly, we, like the Lords of the Board of Trade, are led to believe that a semiskilled country potter was operating a small shop which produced crude pottery incapable of competing with English wares. The word "poor" can be interpreted doubly, connoting both poverty and low quality. Hence, by inference, it was an enterprise destined to failure. But such an impression of failure was not supported by Gooch's own evidence that the pottery works were continuing year after year. In 1734 he reported:

> As to Manufactures We have at York Town, on York River, one poor Potters' work for earthen Ware, which is so very inconsiderable, that there has been little less of that Commodity imported since it was Erected, than there was before.[14]

The 1735 report was equally depreciating,[15] while the following year Gooch opened his report with the comment: "The same poor Potter's Work is still continued at York Town without any great Improvement or Advantage to the Owner, or any Injury to the Trade of Great Britain." [16]

The 1737 report on Trade and Manufactures even contained a special subheading: "Potters' Work." There then followed: "The Potter continues his Business (at York Town in this Colony) of making Potts and Panns, with very little Advantage to himself, and without any dammage to Trade." [17] One wonders why Gooch's persistence in mentioning this enterprise in such terms almost annually did not lead the Board of Trade to question his reasons for mentioning it at all if the pottery was so insignificant. Perhaps they did question it, because in the next report, filed in 1739 after a two-year interval, Gooch dismissed the pottery succinctly, almost impatiently, as though to turn aside further questions that might be raised: "The poor Potter's Operation is unworthy of your Lordships notice." Gooch then proceeded with an admission that:

> The Common People in all Parts of the Colony, and indeed many of the better Sort, are lately gott into the use of Loom Weaving coarse cloth for themselves and Negroes. And our Inhabitants on the other side of the Mountains, make very good Linnen which they sell up in the Country. Nor is the making of Shoes with Hides their own Tanning less practiced, tho' the Leather is indifferent.[18]

It was easier, of course, to admit that the "common People in all Parts of the Colony" were engaged in domestic manufactures than to allow attention to concentrate on a single commercial, industrial enterprise. Only with difficulty could sanctions have been brought to bear against home industries throughout the colony—a single manufactory reported almost annually for eight years was quite another matter. To have lasted this long, the "poor potter" must have been less than poor, and his pottery must have had an importance that either had to be revealed by truthful statement or dissimulated. It appears that Gooch chose the latter course: the pottery being a large enterprise was noticeable; being noticeable it had to be reported; but being large it contributed to the wealth of the colony while competing with British imports which did not, and therefore it should be condoned. Gooch made a practical decision which may reflect his obligation to the colonists: the pottery works had to be downgraded in his reports and attention distracted from it.

The "Poor Potter" and his Wares

Who, then, was the "poor potter," and how wide of the mark was Gooch in so designating him?

The first clue was found in a ledger kept between 1725 and 1732 by John Mercer, who was to become master of the plantation Marlborough in Stafford County as well as an influential colonial lawyer. In 1725, at the age of 21, Mercer was making his way in the world by trading up and down the rivers of Virginia, buying imported goods in towns like Yorktown, where he had a large account with the wealthy merchant Richard Ambler, and exchanging these imports for raw materials at upstream plantations. Included in John Mercer's ledger is an account with one William Rogers having the following entry: "By Earthen Ware amounting to by Invoice

[13] Ibid., p. 133.
[14] Ibid., p. 189.
[15] Ibid., vol. 1324, p. 3.
[16] Ibid., pp. 30–31.
[17] Ibid., p. 104.
[18] Ibid., vol. 1327, p. 83.

12. 3. 6." [19] So large an amount implies a wholesale purchase from a potter. Was William Rogers, then, the "poor potter" of Yorktown?

Scattered throughout the records are references to several William Rogerses from 17th- and 18th-century Virginia (see Appendix 1), but none seems likely to refer to the "poor potter" until one reaches Yorktown. There a deed is recorded from the "Trustees to the Port Land in Yorktown," granting two lots of land on May 19, 1711, to "William Rogers aforesaid Brewer." [20] That he was a brewer admittedly is a weak clue to his being a potter. But, despite this, it is necessary to pursue this William Rogers further. These two lots were granted to Rogers by the Trustees in accordance with previous acts for establishing port towns. Yorktown had been established according to the Act for Ports and Towns in 1691, and Rogers' lots were numbers 51 and 55 (see plat, fig. 1), lying contiguously on the northern border of the town between Read and Nelson Streets. To this day they continue to bear the same numbers.

For year after year nothing appears in the York County records to indicate that William Rogers was connected even remotely with a pottery works. That he was soon prospering as a brewer is suggested by the mention of "Roger's [sic] best Virg[a] aile," as selling at sixpence per quart, in a list of liquor prices presented for Yorktown tavern keepers on March 19,

[19] C. Malcolm Watkins, *The Cultural History of Marlborough, Virginia, (Contributions from the Museum of History and Technology*, U.S. National Museum Bulletin 253), Washington: Smithsonian Institution, in press.

[20] York County Records: Deeds & Bonds, vol. 2, 1701–1713, p. 365 (In York County Courthouse, Yorktown, Va.).

Figure 2. Major Lawrence Smith's original survey plat of Yorktown, Virginia, made according to the Virginia Port Act of 1691, which set up a port town for each county. This plat, still in the York County records, bears the names of successive lot holders from 1691 on into the 18th century. William Rogers' name appears on lots 51 and 55. He was granted this property by the town feoffees in 1711. Additional properties he acquired are mentioned in his will as lots 59, 71, and 75.

1711.[21] In 1714 an indentured woman servant of Rogers ran away and was ordered to serve an additional six months and four days.[22] His name occurs in 1718 in two small court actions to collect bad debts and in another against Robert Minge for trespass. He is recorded in these simply as "Wm. Rogers."[23] There is no other significant mention until 1730, when the wife of "William Stark, Gent." relinquished her right of dower to lands in the County, so as to permit their sale to "William Rogers."[24] Later in the same year "Mr. Wm. Rogers" was sued by Henry Ham, a bondservant, for his freedom.[25] In 1734

[21] York County Records, Book 14: *Orders & Wills*, 1716–1720.
[22] Ibid., pp. 307, 317, 357, 386, 394, 439.
[23] York County Records, Book 17: *Orders, Wills, &c.*, 1729–1732, p. 136.
[24] Ibid., p. 296.
[25] York County Records, Book 18: *Orders, Wills, & Inventories*, p. 15.

LIST OF PLAT OWNERS

—PARTIAL NAME
* ILLEGIBLE

1. Thomas *; W—
2. Neillson; Buckner
3. John Ande—; Buckner
4. (?) Th[r]e[l]keld
5. (?) Q[u]arl[e]; Read; Buckner
6. John *; Buckner
7. Henry Alexander; P. Lightfoot
8. Thomas Greenwood; J. Walker; (?) Amos *
9. Robert L[e]ighton; Sam:Cooper
10. Mr. Joseph; Mr. J. Walker
11. Ralph *; Lightfoot
12. *; Wm. Cary
13. (?) Owen; David
14. Robert Moore; Wm. Cary
15. William Webb; Jn°. Trotter
16. Mr. Thomas; Lightfoot
17. Mr. Dudley Diggs; Lightfoot
18. *; Wm. Cary
19. Thomas Collyer; Wm. Cary
20. Thomas Branson; Wm. Cary
21. Nicholas Harrison; Robt. Ballard
22. Thomas *
23. *
24. Jefferson
25. (?) Charles Hansford
26. William Tomkins
27. James Archer; John (?) Douglas
28. *
29. Saml. Tompson
30. John R—
31. Will[ia]m Pattisson
32. Thomas (?) Wootton; A. Archer
33. Mr. Edwd. Moss Jr.; *; Jn° Loving
34. Capt. *
35. Capt. Edmond Jennings
36. Coll. Wm. Diggs; Lightfoot
37. Thomas Mountford; Lightfoot
38. Richard Trotter; P. Lightfoot
39. John Wyth; Jn°. Martin
40. Richard (?) Trotter
41. David *
42. John *; Diggs
43. Dannl. Taylor
44. Edward Dodds; (?) Jo. Cathafie
45. William Hewit
46. *
47. *
48. Coll. Wm. Cary; 1709
49. James (?) Plowman; 1712
50. Jn°. Simson; Edwd. Powers
51. Wm. (?) Anderson; Wm. Rogers
52. *
53. Will[ia]m—son; Edwd. Smith
54. Edward (?) Gibbs; Ballard
55. James Walker; Wm. Rogers
56. *
57. *; Jn°. —ton
58. Harrison
59. Harrison
60. Mrs. Young
61. Mrs. Young
62. Let to Morrison; Tho. H—
63. Robt. Morrison (?) Jr.
64. *
65. Edwd. Power
66. Ed Power
67 and 71. — Gibbons
67. Deed; Geo. Allen
68. Edward * *
69. Jn°. Wyth; Edwd. Webb
70. A. Archer; James (?) Paxton; N. Hooke
71 and 67. — Gibbons
71. Geo. Allen
72. *
73. Edward Fuller
74. *
75. *

"William Rogers gent" took oath as "Capt. of the Troop." [26] Later that year "William Rogers gent" was appointed "Surveyor of the Landings, Streets, and Cosways in York Town." [27]

In the *Virginia Gazette* for September 10, 1736, Rogers advertised for rent or sale "The House which formerly belong'd to Col *Jennings*, in which the *Bristol* store was lately kept . . . in *Williamsburg*," and on December 22 put in a notice for an overseer.[28] The following year, on June 20, Rogers was appointed to build the county prison for £160.[29] In the *Gazette* for May 4, 1739, he announced the sale of "A small shallop . . . in *York* Town: she is about Five Years old . . . ." [30]

Then, on December 17, 1739, we find that Rogers had died and that his will was presented in court. He had identified himself as "Wm. Rogers . . . Merchant." The will lists the distribution of his lands and property (see Appendix II) to his wife Theodosia, to one daughter, Mrs. Susanna Reynolds, and to his son William Rogers—the latter being under age. In addition to town properties a "Trace of parcel of Land lying & being and adjoining to Mountford's Mill Dam in the County of York commonly called & known by the Name of Tarripin Point" went to William Rogers, Jr.[31]

It is only when we arrive at this document that we find the clue we are seeking: "my interest is that no potters ware not burnt and fit for sale should be appraised." Who but a potter (or the owner of a pottery) would have had in his possession unfired "potters ware" not "fit for sale"?

Any remaining doubts that Rogers operated a pottery are dispelled by the inventory (see Appendix III), which deseribes the estate of a wealthy man, not a "poor" potter. He owned 29 Negroes, considerable plate, a clock worth £6, a silver-hilted sword and spurs, and a silver watch. There were many pictures, including "a Neat Picture of King Charles the Second" and "52 pictures in the Hall." Some of the rooms had "Window Curtains & Vallins," and one of the beds had "work'd Curtains & Vallins" [presumably crewel-worked]. The furniture included a marble table, "12 Chairs with Walnut frames & Cane bottoms," a "japand corner cupboard," "Couch Squab and pillows," "pcl Backgammon Tables," and a great deal more of lavish furnishings. But more important for us is a grouping of items: [32]

1 p[r] large Scales & Weights £2.10 a pcl crakt redware £2
a parcel crakt Stone D[o] £5 11 pocket bottles 3/8
½ barrel Gun powder £2.10 1 old Sain & ropes £1.10
1 horse Mill £8 2300 lb. old Iron £9.11. 8
26 doz q[t] Mugs £5.4 60 doz p[t] D[o] 7.10
11 doz Milk pans £2.4 9 large Cream potts 4/6
9 Midle Sized D[o] 3/ 12 Small D[o] 2/
2 doz red Saucepans 4/ 2 doz porringers 4/
6 Chamber potts 2/ 4 doz bird bottles 12/
3 doz Lamps 9/ 4 doz small stone bottles 6/
4 doz small dishes 8/ 6 doz puding pans 2/
26 Cedar pailes £2.12 40 Bushels Salt £4

With this, added to the provision in the will, we have adequate proof that Rogers ran a pottery shop and that he made both stoneware and red earthenware.

Further evidence is found in the *Virginia Gazette* for February 4, 1740:

> To be Sold by Way of Outcry, at the house of Mr. William Rogers, deceas'd . . . all the Household Goods, Cattle, and Horses; also a very good drought of Steers, 3 Carts, a Parcel of Wheat, and Salt, a large Parcel of old Iron, Parcel of Stone and Earthen Ware, a good Worm Still, a very good Horse Mill to go with one Horse; also a new Sloop, built last March with all new Rigging, and very well fitted, with 2 very good Boats and several other Things.[33]

The horse mill was probably the potter's traditional clay-grinding mill, while we may assume that the large amount of salt was intended for stoneware glaze. Other items in the inventory show that Rogers was in both the brewing and the distilling business and every evidence is that he had achieved great affluence.

Governor Gooch's last report on the "poor potter"

[26] Ibid., p. 121.

[27] Ibid., p. 157.

[28] Lester J. Cappon and Stella F. Duff, *Virginia Gazette Index, 1736 1780* (Williamsburg, Va.: Institute of Early American History and Culture, 1950); and the *Virginia Gazette, 1736 1780* (Williamsburg, Va.: Issued on microfilm by the Institute of Early American History and Culture from originals loaned by other institutions, 1950), reel 1.

[29] Edward M. Riley, "The Colonial Courthouses of York County, Virginia," *William & Mary Quarterly Historical Magazine* (1942), ser. 2 (hereinafter designated *WMQ* 2), vol. 22, pp. 399–404.

[30] *Virginia Gazette* microfilm, op. cit. (footnote 28), reel 1.

[31] York County Records, Book 18: *Orders, Wills, & Inventories*, pp. 525, 537 ff.

[32] Ibid., pp. 553 ff.

[33] *Virginia Gazette* microfilm, op. cit. (footnote 28), reel 1.

was filed in 1741 (none having been sent in 1740). In it he stated:

> The poor potter is Dead, and the business of making potts & panns, is of little advantage to his Family, and as little Damage to the Trade of our Mother Country.[34]

There is little question now that this William Rogers was, indeed, the "poor potter." We also learn from this report that the business was being continued by his family after his death. This is confirmed by a number of documentary clues, the first of which occurs in an indenture of 1741 (proved in 1743 in the York County Deeds). It begins:

> I George Rogers of Bra[i]ntree in the County of Essex [England] coller Maker Send Greeting. Whereas William Rogers late of Virginia Merch[t] was in his life time younger brother to me the said George Rogers and at the time of his death left an Estate to his only son named William Rogers which s[d] last mentioned William Rogers dyed lately intestate so that in right of Law the said Estate is devolved & come unto me . . . .

This document served to appoint "Thomas Reynolds of London Mariner" as his attorney and to assign to him all his rights in the estate.[35]

We hear no further of George, suggesting that his claim on the estate was settled permanently, but of Thomas Reynolds we learn a good deal. On June 6, 1737, as captain of the ship *Braxton* of London, he arrived at Yorktown from Boston "where she was lately built." He brought from New England a cargo of 80,000 bricks, "Trayn Oyl," woodenware, and hops.[36] It was he who had married Susanna Rogers.[37]

He sailed to Bristol on September 30, 1737, perhaps to sell or deliver his new ship in England. In any case, he returned from London the following April as master of the ship *Maynard*. He made several crossings in her until he docked her at London on October 10, 1739.[38] While there he must have learned of the death of his father-in-law; whether for this reason or some other, his name was no longer listed among those of shipmasters arriving at and leaving Yorktown. Since he then would have been in effect the head of the family, he probably gave up the sea and settled in Yorktown to manage William Rogers' enterprises, because William, Jr.,—intended to take over the principal family properties upon his coming of age—died within about a year of his father's death. Reynolds, both on his own account as Susanna's husband and as attorney for George Rogers, logically would have succeeded to proprietorship. In any case, by 1745 he was established so successfully at Yorktown that he was made a justice of the peace. At some point he went into partnership with a Captain Charles Seabrook in a mercantile venture that involved ownership of the ocean sloop *Judith* and two "country cutters" named *York* and *Eltham*.[39]

Reynolds lived next to the Swan Tavern in Yorktown and was characterized by Courtenay Norton, wife of the merchant John Norton, as having "shone in the World in Righteousness."[40] He died in 1758 or 1759.

That the pottery was being operated, presumably by Reynolds, at least until 1745 is evident from an advertisement by Frances Webb of Williamsburg in the *Virginia Gazette* for June 20, 1745. This called attention to "all Sorts of *Rogers*' Earthenware as cheap as at York." And, although we have no assurance that the earthenware was made at the Rogers pottery, we learn from the *Gazette* that two days prior to this the sloop *Nancy* had sailed from Yorktown for Maryland, bearing a "Parcel of Earthenware."[41]

How long the pottery may have flourished is not known. There is no further mention of it after 1745, and the shipping records do not suggest that earthenware or stoneware products were then being shipped out of York River.

The most significant fact about the "poor potter" is the revelation that he made stoneware. Stoneware manufacture is a sophisticated art, requiring special clays, high-temperature firing, and the ability to use salt in glazing. When William Rogers acquired his first lots in Yorktown in 1711 no stoneware, so far as

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[34] Library of Congress Transcripts, op. cit. (footnote 12), vol. 1325, p. 83.

[35] York County Records, Book 5: *Deeds*, 1741–1754, p. 64.

[36] *Virginia Gazette* microfilm, op. cit. (footnote 41), reel 1 (June 17, 1737).

[37] *Tyler's Quarterly* (Richmond, Va., 1922), vol. 3, p. 296.

[38] *Virginia Gazette* microfilm, op. cit. (footnote 28), reel 1 (Sept. 30, 1737; April 17, 1738; June 23, 1738; July 7, 1738; April 20, 1739; July 13, 1739; Aug. 24, 1739; January 25, 1740).

[39] "Reynolds and Rogers," *WMQ* 1 (1905), vol. 13, pp. 128, 129.

[40] *John Norton & Sons, Merchants of London and Virginia*, edit. Frances Norton Mason (Richmond, Va.: Dietz, 1937), p. 518.

[41] *Virginia Gazette* microfilm (Parks' Virginia Gazette, June 20 and July 4, 1745); I. Noël Hume, Part II, p. 110.

we know, was being made in North America. By 1725, when Rogers sold earthenware to John Mercer, the Duché family apparently had just succeeded in making stoneware in Philadelphia.[42] Since we have no documentary evidence of Rogers' first production of stoneware, we do not know whether his stoneware antedated that of the Duchés; we know only that after he died in 1739 numerous pieces of stoneware were listed in what were obviously the effects of his pottery shop. There is strong archeological evidence, however, that it was made about 1730 (see p. 110).

Although Rogers may not have been the first to make stoneware in colonial North America, that he was at least one of the first must have elevated him to a position of prominence among colonial potters. Far from being a poor potter who conducted a business "with very little advantage to himself, and without any damage to Trade," he was supplying a colonial market that heretofore had been filled solely from England and Germany. There is a hint that he may have shipped his wares to North Carolina, because the *Virginia Gazette* announced on September 21, 1739: "Cler'd out of York River . . . September 11. Sloop Thomas and Tryal, of North Carolina, John Nelson, for North Carolina . . . some Stone Ware." [43] Three years before, Rogers had sued in court to collect "a Bill Payable to him from one Richard Saunderson of North Carolina." [44] The possibility that the stoneware in the sloop *Thomas and Tryal* had been made by Rogers is highly conjectural, since European imports often were redistributed and transshipped in American ports. But, since its cargo as a whole consisted of non-European materials, this still remains a possibility.

The most notable inference that Rogers' stoneware may have infiltrated distant colonial markets is found in the Petition of Isaac Parker to the Massachusetts Court to establish a stoneware manufactory in Charlestown, Massachusetts, filed in September 1742: ". . . there are large quantities of said ware imported into this Province every year from New York, Philadelphia, & Virginia, for which . . . returns are mostly made in Silver and Gold by the gent[n] who receive them here." [45]

Since there is no evidence that stoneware was being made at this time in Virginia, other than at Yorktown, it is reasonable to suppose that the "poor potter's" heirs shipped stoneware all the way to New England and that they were paid in hard cash, as distinct from tobacco credits, which would have been the case with local customers. However this may be, the Rogers enterprise, even if its products were confined to Virginia, appears to have been extensive, wealth-producing, and quite the opposite of Governor Gooch's appraisal of it in his reports to the Board of Trade.

As to the location of his kilns, we know that Rogers owned two lots, where he apparently lived, at the northern boundary of the town. He also owned a warehouse by the riverside and other lots on which he was building dwellings when he died. He owned land at "Tarripin Point" and two lots in Williamsburg. Governor Gooch repeatedly located the pottery in Yorktown: "We have here at York Town upon York River one poor Potter's Work . . . ," or, "the Potter continues his Business (at York Town in this Colony)." This is rather good evidence that the kilns were within the town limits rather than at some outside location, such as "Tarripin Point." A waterfront location would have been desirable for many reasons, but, since a potter's kiln would have been a fire hazard not to only Rogers' but to other warehouses, it is questionable whether nearby kilns would have been tolerated. English practice was usually to locate potter's kilns at the far edges of towns or outside their limits. Nevertheless, there were many exceptions, and kilns sometimes were located near the water, especially when practical reasons of convenience in loading ships outweighed the dangers. The North Devon potteries were heavily committed to water transportation, and at least two of the kilns at Bideford in North Devon in the 17th century, for example, were located near the water in what were then densely settled areas.[46] The North Walk Pottery in nearby Barnstaple was also on the water's edge,

[42] "The Votes of Assembly of the Province of Pennsylvania," *Pennsylvania Archives* (Harrisburg), ser. 8, vol. 3, pp. 2047–2049. (From Rudolf Hommel, in correspondence with Lura Woodside Watkins.)

[43] *Virginia Gazette* microfilm, op. cit. (footnote 28), reel 1.

[44] York County Records, Book 18: *Orders, Wills, & Inventories*, p. 290.

[45] "Petition of Isaac Parker, September, 1742," *Massachusetts Archives*, vol. 59, pp. 332–333 (quoted in Lura Woodside Watkins, *New England Potters and Their Wares* [Cambridge: Harvard University Press, 1950], p. 245).

[46] *Biacford-in-Devon: Official Guide to Bideford and District*, edit. Sheila Hutchinson (Bideford, about 1961), p. 35.

close to a thickly populated area;[47] in 17th-century America we find a parallel in the pottery of William Vincent, located at the harbor's edge in Gloucester, Massachusetts, where it was easy for him to ship his wares along the coast.[48] The 18th-century potteries of Charlestown, Massachusetts, which also had wide markets, were clustered along the harbor shore amid a welter of wharves and warehouses.[49] It is conceivable, therefore, that the Yorktown waterfront may have been similarly exposed to the dangers of a potter's kiln, since Rogers transported his wares by water.

More logical from the standpoint of safety, however, would be the pair of lots on the western edge of the town where Rogers apparently dwelt after they were granted to him in 1711. Although it is not conclusive, his inventory, which includes the lists of earthenwares and stonewares mentioned above, appears to have been taken in a sequence beginning with the house and followed by one outbuilding after another. Presumably these were located close together. Things pertaining to the kitchen and perhaps to the quarters follow the contents of the house (in which the "work room" is mentioned), then the distilling apparatus followed by the brewing equipment. Next come the pottery items, then a miscellany of laundry, garden, and cooking gear, and finally stable fixtures and a horse. It is not until the end of the inventory that the boats and their rigging and equipment, doubtless located at the waterside, are mentioned. These speculations are offered for what they are worth in suggesting possibilities for future archeological discovery of the kiln site.

The question of William Rogers' own role in the pottery enterprise perhaps will never be solved conclusively, although, as Mr. Noël Hume points out, there is no evidence that he himself was a potter. His beginnings almost surely were humble ones, humble enough for a potter. We know that his brother George was a maker of horse collars—a worthy occupation, but not one to be equated with the role of an 18th-century gentleman—in Braintree, Essex County, England. There were many potters in Essex in the 17th and early 18th centuries, and one wonders if William Rogers was trained by one of them. But the Essex Records do not reveal a William Rogers whose dates or circumstances fit ours. We do find that a George Rogers died at Braintree in 1750.[50]

Whatever may have been William's early training, it is apparent that he knew the art of brewing and that he engaged in it at Yorktown. To be sure, nearly every farmer and yeoman in the colonies knew how to brew. Furthermore, commercial brewing was probably accepted as an honorable industry by the Crown authorities, since the colonial demand for beers and ales must have always been in excess of the exportable supply. It is possible, we may speculate, that Rogers was trained as a potter but practiced brewing and preferred to be known publicly as a brewer. In any case, he was essentially a businessman whose establishment made ale as well as pottery for public consumption, and it is clear that by 1725 he was conducting a potter's business on a considerable scale. To have done so he must have employed potters and apprentices, yet in cursory searches of the York County records, we have been unable to discover any reference either to potteries or potters, reinforcing the suspicion that every effort—including Gooch's apologetic references—was being made to conduct the pottery in a clandestine manner.

Thus, the only thing we know with certainty is that William Rogers was a very successful entrepreneur who carried on more than one kind of business. We also can deduce from what is disclosed in the records that he ascended high in the social scale in Virginia and that the rate of this ascent was, not surprisingly, in proportion to the increase of his wealth. Whether or not he was a trained potter, one thing is certain: he was not a "poor potter."

As to the role of his son-in-law and successor, Thomas Reynolds, we know with certainty that Reynolds was not a potter. For at least five years and perhaps longer, however, he evidently ran the pottery, which means that there were trained hands to produce stonewares and earthenwares. Who they were or where they came from are not revealed in the records. If, however, we can prove that the wares about to be discussed were made by them, it becomes clear that they were a remarkably competent lot,

[47] C. Malcolm Watkins, "North Devon Pottery and Its Export to America in the 17th Century" (paper 13 in *Contributions from the Museum of History and Technology: Papers 12–18*, U.S. National Museum Bulletin 225, by various authors; Washington: Smithsonian Institution, 1963), pp. 28–29.

[48] Lura Woodside Watkins, *New England Potters and Their Wares* (Cambridge: Harvard University Press, 1950), p. 16.

[49] Ibid., p. 24.

[50] *The Register of Burials in the Parish of Braintree in the County of Essex from Michaelmas . . . 1740* (MS in Essex County Record Office, Chelmsford, England), p. 40.

often able to equal if not to excel their English peers.

The persistence of the pottery for at least 20 and perhaps more than 34 years was owing in part, no doubt, to Governor Gooch's apologetic treatment of it in his reports to the Lords of the Board of Trade and to his leniency toward colonial manufacturers in general. Basically, however, it was a response to public need and to a growing independence and a socio-economic situation distinct from the mother country's. The Virginians had a will and direction which impelled them beyond the restrictions imposed upon them to grow tobacco and do little else. The "poor potter" is significant because he exemplified the impulse to break these restrictions and to move the colony toward a craft-oriented economy. Because his wares were skillfully made and sometimes were scarcely distinguishable from those of his English competitors, he was able to hold his position economically and at the same time to become personally wealthy and influential. The scope of his enterprise—more clearly demonstrated in the archeological section of this presentation—should lead to a reappraisal of Governor Gooch's attitudes toward the endeavors of the colonists. His reports to the Board of Trade are shown to have been dissimulations instead of statements of fact. They evidence a daring and suggest a wisdom and a degree of pragmatism on the part of the Governor that might well have been continued by the Crown and its authorities. This entire episode illustrates a remarkably fluid phase of Virginia's history in which the opportunity for an energetic man to rise from obscurity to wealth and position foretold a pattern that became legendary in American society.

Governor Gooch undoubtedly sensed these internal pressures, as much psychological as economic, to seek the rewards of industry and enterprise. That the pottery later ceased to function and Virginia's manufactures in general failed to develop may reflect the differences in attitudes between Governor Gooch and his successors and the stubborn impositions by the Crown that eventually led to the American Revolution.

There seems little doubt that the "poor potter," William Rogers, and the maker of the pottery so liberally dispersed around Yorktown and elsewhere in Virginia are one and the same. Further archeological investigation and discovery of a kiln or kiln dump should provide the evidence needed for proof.

APPENDIXES

I: Other Virginians by the Name of William Rogers

In order to feel absolutely certain that the William Rogers of Yorktown was the "poor potter" so often mentioned by Governor Gooch, a check was made through the records of all 17th- and 18th-century Virginians named William Rogers to see if any others might possibly have been associated with the Yorktown pottery.

The earliest William Rogers found was listed as one of a group of 60 persons transported and assigned to Richard Cooke in Henrico County.[51] In 1639 a "Mr. William Rogers" was viewer of the tobacco crop in Upper Norfolk.[52] In 1718 a William Rogers died in Richmond County.[53] It is quite evident that none of these was the "poor potter."

In 1704 a William Rogers owned 200 acres in Accomack County on the Eastern Shore,[54] and in 1731 a will of William Rogers was recorded there.[55]

In Surry County several men of this name are noted.

[51] "Abstracts of Virginia Land Patents," prepared by W. G. Stanard, *Virginia Magazine of History & Biography* (hereinafter designated *VHM*) (1899), vol. 5, p. 186.

[52] "Viewers of Tobacco Crop, 1639," *VHM* (1898), vol. 5, p. 121.

[53] *Virginia Wills and Administrations 1632–1800*, comp. Clayton Torrence (Richmond, Wm. Byrd Press, Inc., n.d.), pp. 364–365.

[54] *English Duplicates of Lost Virginia Records*, comp. Louis des Coquets, Jr. (Princeton, N.J.: Privately printed, 1958), p. 128.

[55] *Virginia Wills and Administrations*, loc. cit. (footnote 53).

One of them was bound as an apprentice in 1681. this William Rogers was probably the same man who was listed in 1687 in the Surry militia "for Foot." [57] In 1702 a William Rogers took up some newly opened land "on the South side of Blackwater," which was measured by the surveyor for Charles City County (only meaning, perhaps, that Surry did not have its own surveyor).[58] In 1704 a William Roger (sic) owned 450 acres in Surry.[59] Two years later William Rogers, Jr., had 220 acres surveyed on the "S. side of Blackwater" in Surry County.[60] Meanwhile a William Rogers had recorded a will in Surry in 1701, and another (presumably William Rogers, Jr.) did so in 1727.[61]

A William Rogers was listed in Lancaster in 1694 as the husband of Elizabeth Skipworth,[62] and he appears to have been tithable in the Christ Church parish in 1714.[63] Wills are recorded under the name in Lancaster County in 1728 and 1768.[64]

None of these records dispute the strong evidence discovered at Yorktown concerning the identity of the "poor potter."

II. Evidence of William Rogers' Properties

Virginia Gazette, SEPTEMBER 10, 1736

"To be Lett or Sold, very reasonably. The House which formerly belong'd to Col *Jenings*, in which the *Bristol* store was lately kept, being the next House to *John Clayton*'s, Esq.; in *Williamsburg:* It is a large commodious House, with Two Lots, a Garden, Coach-House, Stable, and other Outhouses and Conveniences. Enquire of Capt. *William Rogers*, in *York*, or of *William Parks*, Printer in *Williamsburg*."

ROGERS' WILL (1739)

To his wife Theodosia: ". . . two Lotts—lyeing & being in the City of W^ms^burgh together with the Dwelling House and other houses thereunto belonging" and also

". . . a Lott lying behind *Cheshire*'s Lott number 63 in York Town that I bought of Mr. George Reade, with all the Improvements upon it during his life and after his death." ["Behind *Cheshire*'s Lott" apparently means Lot 59, next to it. See plat.]

". . . one certain Tract or Parcel of Land, lying being and adjoining to Mountford's Mill Dam in the County of York commonly called & known by the Name of Tarripin Point."

". . . the parcel of Land that I bought of M^r^ Edw^d^ Smith except one Chain and that to be laid off at the end next the Lott that I bought of Francis Moss with all the Improvements on it and in case I should dye before I build upon it, I shall leave all the plank & framing stuff together with the window frames & all the other things designed for the House to my Wife and not to be appraised with my Estate and if my Carpenter is not free that he shall not be appraised but serve his time out and with my said Wife." [Francis Morse owned Lot 75, extreme southwest corner. Therefore, this was probably Lot 74.]

* * *

"unto my son W^m^ Rogers
all my Lotts in Yorktown where I now dwell with all the houses thereunto belonging."
"also the warehouse by the waterside and
all other my Lands and Tenements wherever lying except the Lotts & Land before given to my Wife."

* * *

To his daughter Susanna Reynolds: "the Lott that I bought of M^r^ Francis Morse known by the N° 75 together with the Brickhouse and all other Improvements upon it also one Chain of the Land that I bought of M^r^ Edward Smith to be taken at the end next to the Lott to her & her heirs for Ever in case I dye before the House is done I then leave also bricks enough to finish the house, together w^th^ the window frames & doors and what other framing was design'd for her house . . . ."

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[56] Lyon G. Tyler, "Education in Colonial Virginia," *William & Mary College Quarterly Historical Magazine* (1897), ser. 1 (hereinafter designated *WMQ* 1), vol. 5, p. 221.

[57] "Extracts from the Records of Surry County," *WMQ* 1 (1903), vol. 11, p. 83.

[58] *English Duplicates*, op. cit. (footnote 54), p. 73.

[59] Ibid., p. 210.

[60] Ibid., pp. 81, 83, 86.

[61] *Virginia Wills and Administrations*, loc. cit. (footnote 53).

[62] "Virginia Gleanings in England," *VHM* (1921), vol. 29, p. 435.

[63] "Tithables in Lancaster County, 1716," *WMQ* 1 (1913), vol. 21, p. 21.

[64] *Virginia Wills and Administrations*, loc. cit. (footnote 53).

III: Inventory of William Rogers' Estate [65]

Pursuant to an Order of York Court Dec. the 17th 1739 We the Subscribers being first sworn before Wm. Nelson junr Gent have appraised the Estate of Capt. Wm. Rogers decd. as followeth Vizt.

Waterford £25 Betty £25 Adam £30 Blackwall £30	£110. 0. 0
Nanny £18 Lazarus Son of Nanny £5	23. 0. 0
Amy Daughter of Nanny £16 Grace Daughter of Nanny 8£	24. 0. 0
Barnaby £15 Samson £25 Quaqua £25 Tony £30	95. 0. 0
Jo £30 York £25 Jack £25 George £22 Tom 30	132. 0. 0
Monmouth £30 London £30 Ben £30 Pritty £30	120. 0. 0
Phillis £25 Sarah £30 Harry £25 Lucy £12	92. 0. 0
Little Nanny £25 Phoeby £20 Phil son of Phoeby £5	50. 0. 0
Cato £20 James £18 Peg £16	54. 0. 0

Household Goods &c.

1 Clock £6 one Silver hilt Cutting Sword and one pr. Silver Spurrs 4£	10. 0. 0
1 Tea Pott 5 Spoons 2 pt. Cans and 2 Salts of Silver	11. 15. 0
To a parcel China ware £10 a pcl Glasses & Table Stand £1.10	11. 10. 0
a pcl books £4 a pcl Sheets Table Linnen and one wt. Quilt 22l	26. — —
1 Silver Salver 1 pt. Can 2 Salts 11 Spoons and one Soop Do	14. — —
1 Silver Watch £4 one horse Colt £4 a Coach & 4 horses £40	48. — —
a Neat Picture of King Charles the Second	2. 10. 0
1 Marble Table £2 one corner cupboard wth. a glass face 20/	3. — —
1 Looking Glass £1.10 1 pr. Glass Seonces 15/	£2. 5. 0
1 Chimney Glass wth. a pr. brass arms £2 a japaned corner Cupboard	2. 15. 0
12 Chairs wth. Walnut frames & Cane bottoms	5. — —
1 Dutch picture in a guilt frame	0. 10. 0
7 Cartoons 4 glass Pictures 4 Maps & 3 small Pictures	1. 5. 0
1 Large walnut Table £1.15 one less Do 20/	2. 15. 0
1 small Table & one Tea board 5/ one Iron back 12/	0. 17. 0
1 pr. And Irons 20/ one Iron fender 1 pr. Tongs & Shovel fire 7/6	1. 7. 6
1 Iron plate frame 7/6 8 China Pictures in large frames 8/	0. 15. 6
1 Copper Cistern 13/ 12 Ivory handle knives & forks £1.10	2. 3. 0
11 Eboney Do 12/6 12 Desart Do wth. Ivory handles 12/	1. 4. 6
4 Window Curtains & Vallins £1.10 one small Cherry Table 6/	1. 16. 0
2 Mares & one Colt £5 a pcl of Carpenters Tools £2.10	7. 10. 0
27 head Cattle £17 Six high back Chairs wth. rush bottoms £1.10	18. 10. 0
1 Bed Bolster Pillow Bedsted 1 pr. blankets & Quilt	3. — —
2 small pine Tables	0. 4. 0
1 large Bed Bolster 1 Pillow 1 pr. blankets Bedstead Curtain rod Workt Curtains & Vallins	7. — —
1 Bed Bolster 2 pillows 1 pr. blankets 1 Old Quilt old blue Hangings & Bedsted	4. — —
1 Looking Glass 20/ 2 pr. window Curtains 10/ one pr. Seonces 6/	1. 16. 0
1 pr. large mony Scales & weights 12/6 1 pr. less do 5	0. 17. 6
1 pr. small do 2/6 5 rush bottom Chairs wth black frames 7/6	0. 10. 0
A Chimney piece 10/ 52 Pictures in the Hall 10/	1.
1 Couch Squab and pillow 30/ 1 japand Tea Table 5	1. 5. 0
1 Small pine Table 1/ 2 Wa nut Stools 3/	0. 4. 0
1 Chimney Glass 4/ one pr. Seonces 7/6 1 Dressing Table 2	1. 09. 6

[65] From *Orders, Wills, & Inventories*, York County Records, no. 18, pp. 553 ff. The linear totals given in the right-hand column are not always the sum of the amounts noted in each line, but they are presented here as faithfully as possible.

1 Looking Glass wth Drawers 20/ one Iron back 6/	£1. 6. 0
1 p^{r}. And Iron 7/6 1 p^{r}. Tongs & fire Shovel 4/	0. 11. 6
1 brass fender 5/ 1 Case wth Drawers 1.5	1. 10. 0
1 p^{r}. Backgammon Tables 12/6 Tea Chest & Cannisters 6/	0. 18. 6
1 Dresing Box 5/ 1 Trumpet 5/ 1 large Elbow Chair 7/6	0. 17. 6
A Dutch Picture in a guilt frame	2. 0
1 Bed Bedstead Bolster 2 pillows 1 blanket 1 Quilt Curtains Vallins & Curtain Rod	6. 0. 0
1 Bedstead wth Sacking bottom 1 small Bed & one pillow	1. 10. 0
1 Dram Case & 6 Bottles 12/6 2 p^{r}. window Curtains 10/	1. 2. 6
1 Copper preserving pan 10/ 1 p^{r}. large pistols 15/	1. 5. 0
1 p^{r}. Holsters 5/ 1 p^{r}. holster Caps & housing laced and flowerd with Silver 20/	1. 5. 0
14 bottles Stoughton's Elixir 14/ 6^{l} Chocolate 18/	1. 12. 0
20 lb Cocanuts £2, 50 Ells Ozn brigs £2.10	4. 10. 0
15½ yds Dorsay 9 Strips twist 2 hh Silk 5 doz Coat and 2 doz. brest buttons	2. 0. 0
3 Cloth brushes 3/ 28 Maple handle knives 5/10	0. 8. 10
10 Yarn Caps 2/6 3 horn books 6^{d} 3 Baskits 4/	0. 7. 0
1 Iron back in the work room 5/ 1 D^{o} in the Little Chamber 6/	0. 11. 0
1 Iron fender 1 p^{r} Tongs & fire Shovell 5/ 1 p^{r} Andirons 2/	0. 7. 0
5 brass Candle Sticks 2 Tinder boxes & 1 Iron Candle Stick 14/	0. 14. 0
1 Flasket and a parcel Turners Tools	0. 18. 0
8 p^{r} Negros Shoes £1.4. 72 yds Cantaloon £1.4	2. 8. 0
11 y^{ds} Coarse Stuff 5/6 1 old Desk 20/ 1 Cedar Press 15/	2. 0. 6
13 Cannisters 3/6 16 Tin patty pans 12 Cake D^{o} 2 Bisket D^{o} 12 Chocolate D^{o} 2 Coffee pots and 1 Funnell 11/6	0. 15. 0
1 Box Iron & 2 heaters 5/ 1 Coffee mill 4/	£0. 9. 0
1. 2 hour Glass 1/ 5 broad hows 13/ 1 Spining Wheel 5/	0. 19. 0
2 4 Flat Irons 6 1 Trooping Saddle blue housing Crooper & Brest plate 20/	1. 6. 0
An Ozenbrig Skreen 10/ 1 small pine Chest 2,6	0. 12. 6
1 Walnut Table 12/6 5 Candle Moulds 7 6	1. — —
1 Bark Sifter 5/ 10 Pictures 4/ 1 Cold Still 12/6	1. 1. 6
1 p^{r} Stilliards 7/6 12 New Sickles 12/ 10 old D^{o} 2/6	1. 2. 0
2 larger Sieves and 1 Hair Sifter 7,6 1 Case wth. 14 bottles 15/	1. 2. 6
1 Bell Metal Skillet 12/ 1 p^{r} brass Scales & weights 10/	1. 2. 0
1 Coffee Roaster 4/ 1 fire Shovell 1 p^{r} Tongs & 1 Iron fender 3/	0. 7. 0
6 woodin Chairs and 1 old Cane D^{o}	0. 8. 0
1 pewter Ink Stand 2/6 1 Tea Kettle 5/	0. 7. 6
2 Trivets 2 p^{r} Sheep Sheers and 1 p^{r} Bellows 5/	0. 5. 0
1 Warming pan 5/ 20 doz Quart bottles 2£ 1 whip Saw 20/	3. 5. 0
3 Empty Casks and 2 beer Tubbs 7/6	0. 7. 6
2 Powdering Tubbs and 1 large Cask	0. 6. 0
A Meal Binn 3/ 3 Spills 9/ 1 worm Still £2/10	3. 2. 0
4 Wheel barrows 8/ 3 Spades 7/ a Copper Kettle £2.10	3. 5. 0
1 large Iron pott 12/6 1 Iron Kettle 15/ 1 Flasket 1/6	1. 9. 0
1 Iron pott 1/6 1 Bed Bolster Bedsted 1 Rugg & 10 Blanket 1/10	1. 11. 6
1 Bed Bolster Bedsted Blanket and 1 old Quilt	17. 6
1 old Table 1/6 6 oxen Ox Cart Yokes & Chains	13. — —
80 lb Ginger 10/ 24 lb. Alspice £1.4 55 lb. Rice 5/	1. 19. 0
50 lb. Snakeroot £1/5 34 lb. Hops 17/ 124 lb. feathers £5.3.4	7. 5. 4
a pcl old Sails & riging	3. — —

1 p^{r} large Scales & weights £2.10 a pcl crakt red ware £2	£4. 10. 0
a parcel crakt Stone D^{o} £5 11 pocket bottles 3/8	5. 3. 8
½ barrel Gun powder £2.10 1 old Sain & ropes £1.10	4. — —
1 horse Mill £8 2300 lb. old Iron £9.11.8	17. 11. 8
26 doz q^{t} Mugs £5.4 60 doz p^{t} D^{o} 7.10	12. 14. 0
11 doz Milk pans £2.4 9 large Cream potts 4/6	2. 8. 6
9 Midle Sized D^{o} 3/ 12 Small D^{o} 2/	0. 5. 0
2 doz red Saucepans 4/ 2 doz porringers 4/	0. 8. 0
6 Chamber potts 2/ 4 doz bird bottles 12/	0. 14. 0
3 doz Lamps 9/ 4 doz small stone bottles 6/	0. 15. 0
4 doz small dishes 8/ 6 doz puding pans 2/	0. 10. 0
26 Cedar pailes £2.12 40 Bushels Salt £4	6. 12. 0
104 lb. pewter in Dishes & plates	5. 4. 0
1 Gallon 1. 2q^{t} 1 q^{t} 1 p^{t} & 1 ½ p^{t} pewter pott	0. 16. 0
1 pewter Bed pan 5/ 12 Sheep £3	3. 5. 0
6 Washing Tubbs 12/ 1 Chocolate pott & Mill 6/	0. 18. 0
6 Tea Spoons & a Childs Spoon of Silver	1. — —
7 Bell Glasses 16/ 1 Kitchen jack 26/	2. 2. 0
1 p^{r} Andirons 15/ 1 large Copper pott & Cover 30/	£2. 5. 0
1 less D^{o} 17/6 1 Marble Mortar 12/6	1. 10. 0
1 Bell Metal D^{o} and Iron Pestle	0. 10. 0
2 large knives 1 Choping D^{o} 1 Basting Ladle 1 Brass Skimer 1 p^{r} small Tongs and flesh fork	0. 5. 0
1 Copper Stew pan 1 Copper & 1 Iron frying pan 1 Tin fish Kettle	0. 14. 0
1 Brass Skillet and 2 Tin Covers	0. 9. 0
1 Iron Crane and 1 large Pestle	0. 8. 0
1 Water pail 1/6 1 Iron pott 1 p^{r} hooks & 1 Iron Ladle 6/	0. 7. 6
1 larger Iron pott & hooks 6/ 1 horse Cart & wheels £3	3. 6. 0
1 old whip Saw 10/ 1 Set old Chain harness for 3 horses 20/	1. 10. 0
1 Set D^{o} for 3 Horses £4 8 Iron Wedges 12/6	4. 12. 6
1 Bay horse £1.5 1 p^{r} wooden Scales 2/ 2 Baskets 2/6	1. 9. 6
1 old horse Cart £1.5 212 bushels wheat a 1/6^{d} £15.18.	17. 1. 0 [sic]
1 old Boat 10/ a New Sloop Boat Sails Rigging 2 Anchors 2 Cables 1 old Hawser and 1 Grapnell	90. 0. 0
1 Glass Light 3/ 2 Wyer Sieves 7/6	0. 10. 6
	£1224. 5. 6 [sic]

John Ballard
John Trotter
Ishmael Moody

Part II: Pottery Evidence

Ivor Noël Hume

The Salt-Glazed Stoneware

Attention was first drawn to the potential importance of the 18th-century pottery factory at Yorktown in 1956 when an examination of the National Park Service artifacts from the town revealed large quantities of stoneware sagger fragments visually identical to those previously retrieved from a site at Bankside in London.[66] On the assumption that where kiln "furniture" is found there also must be examples of the product, a more careful search of the Yorktown collections was made, yielding numerous fragments of brown salt-glazed stoneware tankards and bottles which, although at first sight appearing to be typically English, were found to have reacted slightly differently to the vagaries of firing than did the average examples found in England.

The largest assemblage of stoneware and sagger fragments came from the vicinity of the restored Swan Tavern, although the actual relationship of the pieces, one to another, was not recorded in the National Park Service's archeological report on the excavations. Nevertheless, the presence on the same lot of fragments of pint tankards adorned with a sprig-molded swan ornament (fig. 3) along with numerous pieces of sagger (fig. 12) seemed positive enough evidence. English tavern mugs of the 18th century were frequently decorated with an applied panel copying the sign which hung outside the hostelry.[67] The Swan Tavern at Yorktown was probably no exception, and to the often illiterate traveler it would have been identified either by a painted sign or perhaps by a swan carved in wood and set above the entrance. The significance of the swan-decorated tankards is simply that the tavern keeper would have been unlikely to have sent to England for such objects when, as the saggers so loudly proclaim, a local potter could supply them as needed and without cost of transportation.

The above reasoning seemed to link the saggers with brown salt-glazed stonewares rather than with products in the Rhenish tradition, which would have been the other obvious possibility.[68] Wasters were thinly represented among the sherds from Yorktown, although many underfired or overburned pieces were initially claimed as such. A more mature study of the Yorktown potter's products has shown that these variations would not have been considered unsalable, nor, in all probability, would they have been marked down as "seconds." Examples exhibiting both extremes of temperature have been found in domestic rubbish pits at Williamsburg, clearly showing that such pieces did find a ready sale. Figure 4 illustrates a mug fragment from Williamsburg with a large, heavily salted roof-dripping lodged above the handle and overflowing the rim, a blemish the presence of which is hard to explain if the mug was fired in a sagger. Such a piece found in the vicinity of a kiln reasonably could be considered a waster. It must be deduced, therefore, that, providing the Yorktown potter's vessels would hold water and stand more or less vertically on a table, they would find a market.

The site of Rogers' kilns in or near Yorktown has not been found, nor have his waster tips and pits been located. In the absence of such concrete evidence, a study of his wares may be thought premature. But, while numerous questions obviously remain to be answered, sufficient data have now been gathered to

[66] Adrian Oswald, "A London Stoneware Pottery, Recent Excavations at Bankside," *The Connoisseur* (January 1951), vol. 126, no. 519, pp. 183–185.

[67] J. F. Blacker, *The A.B.C. of English Salt-Glaze Stoneware* (London: 1922), pp. 46, 48, 51, 56, 57, 63, and 65.

[68] Kiln waste found in recent excavations in Philadelphia indicate that Anthony Duché was manufacturing stoneware there in the style of Westerwald in the 1730s.

identify a considerable range of brown stoneware as being of Tidewater Virginia manufacture. There is, of course, good reason to suppose that much, if not all, of it is a product of the Rogers factory, although until that site is dug one cannot be certain. It can be argued, perhaps, that if there was one more or less clandestine stoneware potter at work in the area, there might well be others. It could also be added that two earthenware-pottery-making sites have been discovered in the Jamestown–Williamsburg area for which no documentary evidence has been found. The very fact that such enterprise was officially discouraged reduces the value of the negative evidence to be derived from the absence of documentation.

The most convincing evidence for the identification of Rogers' stoneware comes from the already mentioned Swan Tavern mugs and from a quantity of sherds found in a 4- to 7-inch layer beneath Yorktown's Main Street in front of the Digges House in the spring of 1957. This material was exposed during the laying of utilities beside the modern roadway. So tightly packed were the fragments of saggers and pottery vessels that they appeared to have been deliberately laid down as metaling for the colonial street. Several years later Mr. Watkins discovered that in 1734 William Rogers had been appointed "Surveyor of the Landings, Streets; and Cosways in York Town." It is reasonable to suppose, therefore, that Rogers disposed of his kiln waste by using it for hard core to make good the roads under his jurisdiction. Such a use of potters' refuse has ample precedent in that the wasters and sagger fragments from the 17th-century-London delftware kilns were dumped on the foreshore of the river Thames to serve the same purpose. Similarly, stoneware waste from the presumed Bankside factory[69] was used there to line the bottoms of trenches for wooden drains.

The pottery fragments found in the Yorktown road metaling comprised unglazed, coarse-earthenware pans and bowls; pieces of badly fired, brown, salt-glazed stoneware jars and bottles; and numerous sagger fragments.

In the years since interest first was shown in the products of the Yorktown factory, a useful range of examples has been gathered from excavations in Williamsburg and in neighboring counties. The single most significant item was recovered from another kiln site in James City County (known as the Challis site) on the bank of the James River. This object, a pint mug (fig. 5), is the best preserved specimen yet found. It is impressed on the upper wall, opposite the handle, with a pseudo-official capacity stamp[70] comprising the initials W R beneath a crown (William III Rex) which, perhaps, might have led to an intentional misinterpretation as the mark of William Rogers' factory. The official English marks generally were incuse or stamped in relief with the cypher and crown within a borderless oval. They were always placed close to the rim, just left of the handle. Rogers' stamp was set in a much more pretentious position and was enclosed within a rectangle marking the edges of the matrix (fig. 6).

The Challis site mug was a key piece of evidence, being the first example found that illustrated the position of the W R stamp, and it was sufficiently intact for a drawing to be made, its capacity measured, and its variations of firing studied. The association of the Challis mug with the Rogers factory is based on the fact that there is an identical stamp among the Park Service's artifacts from Yorktown (fig. 7), along with another pseudo W R stamp which had been applied to the *base* of a tankard.

A measured drawing of the Challis mug was given to Mr. James E. Maloney of the Williamsburg Pottery,[71] who kindly agreed to undertake a series of experiments to reproduce the piece in his own stoneware kiln, using local Tidewater clay. The results of the first trials were extremely successful, and they showed that it would be possible to reproduce exact copies of the Yorktown wares from this clay (fig. 8). Thus any doubt as to the supply source was dispelled.

[69] No trace of a kiln was found on the Bankside site in Southwark; it is probable that the waste came from another location nearby, possibly from the factory established in Gravel Lane around 1690, which continued under various managements until about 1750. It may be noted that, in the same way that much Southwark delftware has been erroneously attributed to Lambeth, it is likely that brown stonewares in the so-called style of Fulham was made in Southwark before Lambeth rose to prominence in that field. See F. H. Garner, "Lambeth Earthenware," *Transactions of the English Ceramic Circle* (London: 1937), vol. 1, no. 4, p. 46; also John Drinkwater, "Some Notes on English Salt-Glaze Brown Stoneware," *Transactions of the English Ceramic Circle* (London, 1939), vol. 2, no. 6, p. 33.

[70] W. R. excise or capacity stamps continued to be impressed on tavern mugs long after William III was dead. The latest published example is dated 1792. Drinkwater, op. cit. (footnote 69), p. 34 and pl. XIIIb.

[71] The Williamsburg Pottery, on Route 60 near Lightfoot, specializes in the reproduction of 18th-century stoneware and slipware.

Figure 3.—PINT AND QUART MUGS of brown salt-glazed stoneware made for the Swan Tavern at Yorktown. Each mug is decorated with an applied swan in high relief.

The conditions of firing at the Williamsburg Pottery, however, are somewhat different from those that would have prevailed in the 18th century. Mr. Maloney's kiln is fired by oil rather than wood, so that the localized variations of color resulting from the reducing effects of wood smoke have been eliminated. In addition, Mr. Maloney's pots are fired without the use of saggers, thus providing more uniform atmospheric and salting conditions than would have been possible with the 18th-century method of stacking the kilns.

The Yorktown mugs were hand thrown, but a template was used to shape the ornamental cordoning. It was first assumed that a single template had served to fashion both the cordons at the base and the groove below the lip. We had such a tool made of aluminum, copying the Challis mug's ornament, and proportionately enlarged to allow for shrinkage in firing. But in using this template Mr. Maloney discovered that it was impossible to shape the whole exterior of the vessel in one movement without the tools "chattering" against the wall. Since none of the Yorktown sherds nor, indeed, any of the brown-stoneware mugs I have studied in England exhibit

ACKNOWLEDGMENTS

I am indebted to Colonial Williamsburg for helping to subsidize the preparation of this paper and for permission to illustrate specimens from its archeological collections; also to J. Paul Hudson, National Park Service curator at Jamestown for similar facilities; as well as to Charles E. Hatch, senior National Park Service historian at Yorktown, for access to various archeological reports in his library.

I am particularly grateful to James E. Maloney of the Williamsburg Pottery for the immense amount of work which he so generously undertook not only to reproduce copies of the Yorktown products but also to recreate the wasters as well, thus providing information regarding the colonial technical processes that could not have been obtained in any other way. I am also grateful to Joseph Grace, Colonial Williamsburg's watchmaker and engraver who made an accurate copy of the unofficial excise stamp used on Rogers' mugs, and to my secretary Lynn Hill, who toiled long and hard to bring order into this report.

I am further indebted to Wilcomb E. Washburn, Chairman, Department of American Studies, at the Smithsonian Institution, who first drew my attention to the artifacts in front of the Dudley Digges House; and to my wife Audrey, to John Dunton and William Hammes, all of Colonial Williamsburg's department of archeology, who through the years have helped collect ceramic evidence from Yorktown.

I. N. H.

Figure 4.—Yorktown stoneware mug fragment marred by kiln drippings lodged above the handle. The fragment was found in Williamsburg. Height of sherd 4 centimeters.

this feature, it is clear that the potters used only a small template which molded the base cordoning alone, a technique in marked contrast to that of the German Westerwald potters of the same period, whose mass-produced tankards and chamberpots invariably exhibit considerable "chattering." Shaping the lip of the Yorktown tankards appears to have been accomplished entirely by hand as was the application of the encircling groove below it. Because the clay used in the manufacture of these brown stonewares is relatively coarse, it does not lend itself readily to the thin potting so characteristic of English white salt-glaze or the refined Nottingham and Burslem brown stonewares. Consequently, it was necessary to pare down the mouths of the mugs to make them acceptable to the lips of the toper. This interior tooling, extending about half an inch below the rim, is found on all the Yorktown and English brown stonewares of this class. The technique is the reverse of that used by the Westerwald potters, whose mugs are thinned from the outside, leaving the straight edge on the interior.[72] Having imbibed from both types of tankard, I believe that the English (and Yorktown) technique is distinctly preferable. One's upper lip does most of the work; the paring of the inside of the vessel shapes the rim away from that lip and carries the ale smoothly into the mouth.

The treatment of the single-reeded handle on the Challis site mug equals the best English examples, being thin and of sufficient size to accommodate three fingers, with the top of its curve remaining below the edge of the rim so that the thumb cannot slip over it. In addition, the lower terminal is folded back on itself and impressed. While it has often been said that the signature of a potter is found in the shaping of his rims and his handles, we must remember that in a large commercial pottery the person who applies the handles often is not the same workman as he who throws the pot. This explains the considerable variety among the handles of supposed Yorktown tankards, some of them very skillfully fashioned and applied, others appallingly crude. It is inconceivable that all can be the work of a single craftsman.

The iron-oxide slip into which the upper part of the body and handle of the Challis site mug was dipped provided the vessel with a pleasing purplish-to-green mottling when struck by the salt, but, compared to its English prototypes, the variations of color and the unevenness of the size of the mottling label it a product of inferior firing. Nevertheless, in criticizing the Yorktown stoneware, we might remember Dr. Johnson's comment on women preachers,

Figure 5. Yorktown stoneware mug, found in James City County, which was discarded about 1730. Height 12.5 centimeters; capacity 17 fluid ounces.

[72] I. Noël Hume, *Here Lies Virginia* (New York: Knopf, 1963), fig. 55.

whom he likened to a dog walking on its hind legs, saying: "It is not done well; but you are surprised to find it done at all."

On the evidence of the many fragments of Yorktown mugs found in Williamsburg excavations, it may be supposed that the Challis example was of above-average quality. Many of the Williamsburg sherds are both badly overfired and poorly mottled, owing either to inadequate salting or to the use of a slip of the wrong consistency. The much-restored specimen shown in figure 9 was found in a mid-18th-century rubbish deposit[73] and apparently had belonged to John Coke, who kept tavern in Williamsburg east of the Public Gaol. In this example, the intended mottled effect has become a solid band of purple, and the body color below has turned dark gray. I had long supposed that both were the result of overfiring. Experiments by Mr. Maloney, however, clearly showed that the gray body may result from a reducing atmosphere as readily as by excessive temperature, while the purple zone could be due to the slip's being

Figure 6.—Silver reproduction of the matrix used by the Yorktown potter to apply unofficial excise stamps. Height 1.45 centimeters.

[73] Colonial Williamsburg, E. R. (Excavation Register) 140.27A.

Figure 7.—Examples of W.R. stamps on Yorktown stoneware mugs. Right, from below the rim; left, on the underside of the base. Enlarged.

Figure 8.—Reproduction of a Yorktown salt-glazed stoneware mug made from local clay at the Williamsburg pottery. Height 12.8 centimeters.

Figure 9.—Poor-quality mug of probable local stoneware, discarded in the mid-18th century. Found in Williamsburg. Height 13.4 centimeters; capacity 23 fluid ounces.

too thick. Two test mugs fired side by side at a temperature of 2300° F., using thick and thin slips of iron oxide, produced the solid-purple band and the brown mottle respectively.

Before dismissing the John Coke mug as merely an example of wrong slip consistency, it should be noted that this piece has none of the characteristics of the Challis mug; the handle is quite different in both size and shape and is applied without the folded terminal, the proportions are poor, and the template used for the base cordoning is so worn on its bottom edge that the wide upper cordon is more pronounced than the base itself, thus giving the whole vessel a feeling of stubby instability. In addition, the body appears to have been scraped round after the slip had been applied, possibly to remove the excess. All in all, it is a miserable mug, and we may be forgiven for wondering whether it is really a product of William Rogers' operation. Some of his tankards may have been made by apprentice potters, which would account for somewhat varying shapes. But the handle is not an inept creation as handles go; it is simply an entirely different type from that used on the English stoneware that Rogers copied. Even more curious is the question of the template, which should have been discarded long before. While the throwing variations of Rogers' potters may have been overlooked, little can be said for a master craftsman who would allow the use of tools so worn as to mar the esthetic quality of every mug produced. We may wonder whether there was another stoneware potter at work in Virginia in the mid-18th century or whether, after Rogers' death, his factory's standards were allowed to deteriorate to the level of the John Coke mug.

Although the tavern tankards are the most informative of the Yorktown products, numerous other stoneware forms were produced. These are well represented in the National Park Service and Colonial Williamsburg collections. The most simple and at the same time the most attractive of these is a group of hemispherical bowls (fig. 10), two of which were found in the same deposit as the Coke mug.[74] One, which had been dipped into an iron-oxide slip in the same

[74] E.R. 140.27A.

Figure 10.—Hemispherical bowls of Yorktown stoneware, discarded in the mid-18th century. Found in Williamsburg. Rim diameter of both 17.15 centimeters.

manner as were the tankards, has a pale gray body with a narrow band of brown mottling below the rim. The other Coke bowl has a dirty greenish-gray body, while the slipped band is a heavy purplish-brown with little mottling. The entire bowl is too heavily salted, an infirmity which often may have afflicted these pieces. A fragment of a slightly smaller and even more heavily salted bowl was found in 1961 by Mrs. P. G. Harrison in her flower bed at Yorktown,[75] thus seeming to confirm the Yorktown origin of the Coke bowls.

There is no doubt that bottles and jars, some of considerable size, were among the Yorktown factory's principal products, but this does not mean necessarily that all such items found in the vicinity of Yorktown or Williamsburg are Rogers' pieces. Just as the tavern tankards were copies of English mugs, so the bottles and jars had their prototypes among the wares of English, brown-stoneware potters. The difference is simply that the kitchen vessels have rarely attracted the attention of collectors and therefore are poorly represented in English museums. Consequently we have little opportunity to study them and to determine how such pieces differ from those made at Yorktown. At this stage it is possible to be sure only of the Virginia origin of those examples whose clay is clearly of the local variety. Such an identification can be made only when the piece is markedly underfired and retains the coloring and impurities characteristic of earthenwares of proven Virginia manufacture. Fortunately, the large bottles are small mouthed and neither slipped nor glazed on the inside, thus ensuring that, if the piece is underfired the earthenware characteristics will be readily discernible. Fragments of underfired stoneware bottles were among the most common sherds recovered from the colonial roadway at Yorktown, providing invaluable evidence to aid the identification of the Rogers stoneware body composition and color. It must be reiterated, however, that this guide is confined to underfired products and that those correctly burned cannot be distinguished as yet from others of English manufacture.

The globular bottle shown in figure 11 is underfired and consequently not a true "stoneware," but from the outside it bears all the characteristics of a good quality product. This undoubtedly local and almost certainly Yorktown example was found on the John Coke site in Williamsburg [76] in a context of about 1765. The body is evenly potted, the cordoning below the mouth neatly tooled, and the broad strap

[75] Colonial Williamsburg, cat. no. 1913.

[76] E.R. 157G.27A (also 159A, 165A, 173, and 173A).

Figure 11.—An underfired Yorktown "stoneware" bottle, discarded about 1765. Found in Williamsburg. Surviving height 24.77 centimeters.

handle rugged and tidily shaped into a finger-impressed rattail terminal. The handle can, perhaps, be faulted, in that it will accommodate only two fingers with comfort, and it is a little wider in proportion to its size than any I have seen in England. The iron-oxide slip which extends to the midsection of the body is well mottled and predominantly of good color. Ignoring the underfiring, this bottle may be classed as a very creditable piece of potting, seemingly quite as good as most such vessels turned out by English potters in the mid-18th century.[77]

Globular-bodied jars with everted collarlike mouths can be proved to have been made at Yorktown on the evidence of a few small under- and over-fired sherds recovered from the old road metaling in front of the Digges House. The best example recovered from a dated archeological context in Virginia is a jar found in a rubbish deposit of about 1763–1772 at the plantation of Rosewell in Gloucester County.[78] But like the well-fired bottles, its Yorktown provenance cannot yet be proved.

The last major category of kitchen stoneware believed to have been made at the Yorktown pottery

[77] The majority of archeologically documented pieces have been recovered from English domestic sites and not from kiln dumps.

[78] I. Noël Hume, "Excavations at Rosewell, Gloucester County, Virginia, 1957 1959," (paper 18 in *Contributions from the Museum of History and Technology: Papers 12 18*, U.S. National Museum Bulletin 225, by various authors; Washington, Smithsonian Institution, 1963), p. 208, no. 3 and p. 209, fig. 28, no. 3.

Figure 12.—An incomplete sagger and lid for quart tankards, with a Swan Tavern pint mug seated in it. Found at Yorktown.

is a group of pipkins (fig. 13, no. 7). These were often overburned and improperly salted, turning the body a greenish gray and the iron-oxide slip to a coarse brown mottling with a similar greenish hue. The bodies of these vessels are generally bag-shaped and are broader toward the base than at the rim, which is slightly everted and tooled into a rounded lip over a cordon of comparable width. The handles were made separately in solid rolls that were pierced longitudinally with a stick or metal rod to avoid warping in firing or heat retention in use. They possess pestlelike terminals that were luted to the body after shaping. No definite evidence has yet been found to identify these vessels as Yorktown products, but they do exhibit color characteristics, particularly when overfired, comparable to those of one of the Coke hemispherical bowls as well as to some of the tankard fragments.

Figure 13.—Yorktown stoneware bottle and pipkin, and characteristic earthenware rim forms.

FIGURE 13

1. Creampan, rim sherd of typical Yorktown form, slightly flaring externally and incurving within, hard red earthenware with grey-to-pink surface and one spot of dark-brown glaze on the outside; presumably biscuit and rejected before glazing. Diameter approximately 10¼ inches. Found at Yorktown along with other similar rims beneath the roadway south of the Digges House. Colonial Williamsburg collection.
2. Creampan, section from rim to base, a typical example of the "rolled-rim" technique, the body poorly fired, pink earthenware flecked with ocher, presumably biscuit and rejected before glazing. The sherd is badly twisted and is an undoubted waster. Diameter approximately 16 inches. National Park Service collection from Yorktown. No recorded context.
3. Creampan, rim and wall fragment, rim technique similar to no. 2, but heavier and the body thicker; pale pink earthenware flecked with ocher. Presumably biscuit and rejected before glazing. Diameter uncertain. National Park Service collection from Yorktown. No recorded provenance.
4. Creampan, rim and wall fragment, the rim form a variant on the everted and rolled technique, seemingly having been turned out and then rolled back toward the interior. The body orange-to-pink earthenware flecked with ocher, presumably biscuit and rejected before glazing. Diameter approximately 10½ inches. National Park Service collection from Yorktown. No recorded provenance. Fragments of three pans of this type were present in the as-yet-unpublished group of artifacts from the Challis site in James City County whence came the key Rogers stoneware tankard (fig. 3), all of which were buried around 1730.
5. Funnel, lower rim fragment, lead-glazed pale pink-bodied earthenware similar to the two examples illustrated in figure 15; the rim everted and tooled beneath, a technique paralleled by those on numerous bowls found at Yorktown and Williamsburg. A rim sherd of this form was among the pieces found in front of the Digges House. The funnel is thin walled, well potted, and coated with a ginger-to-yellow mottled glaze both inside and out. National Park Service collection from Yorktown; no recorded context. The comparable funnels cited above were discarded in the mid-18th century.
6. Porringer, small rim fragment only, but bearing traces of handle luting which thus identifies the vessel; the rim everted and flattened on the top, pale pink-bodied earthenware, presumably biscuit and rejected before glazing. Diameter approximately 6⅛ inches. National Park Service collection from Yorktown; no recorded provenance.
7. Pipkin, brown salt-glazed stoneware, bag-shaped body with slightly rising base, the rim thickened, slightly everted, with a tooled cordon beneath. The handle (not part of this example) was made as a solid roll and when soft pierced longitudinally with a stick. The glaze is well mottled and a purplish green. The body was thrown away in the mid-18th century, but the handle is unstratified. Colonial Williamsburg archeological collection (body) E.R. 140.27A, (handle) 30B. Other fragments from Williamsburg show that the rim usually was drawn slightly outward at a point at right angles to the handle to create a simple spout. Excavated examples of these pipkins range in rim diameter from 4⅛ to at least 5⅝ inches.
8. Bottle, brown salt-glazed stoneware, neck and handle fragment only, the body dark gray and the oxide slip a deep purple to yellow as a result of overfiring. Glazing also occurs on the fractures, identifying this piece as a waster and therefore of considerable importance. Other blemishes include roof drippings on the handle and body which indicate that the bottle was fired without the protection of a sagger. The cordoning on the neck is well proportioned, and the handle terminates in a neatly fingered rattail. National Park Service collection from the Swan Tavern site at Yorktown; unstratified, S.T. 213.

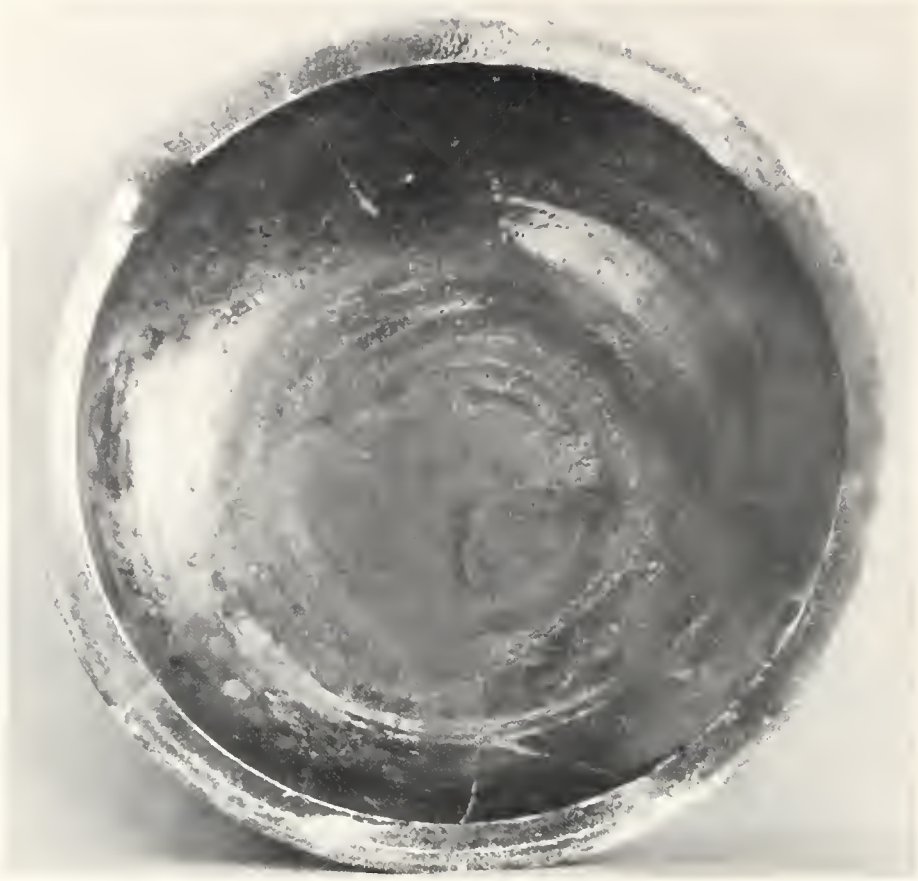

Figure 14.—Brown lead-glazed earthenware creampan of typical Yorktown type, probably dating from the second quarter of the 18th century. Found in Williamsburg. Rim diameter 35.56 centimeters.

Stoneware Manufacturing Processes

The types of kiln used by the Yorktown potters as well as their techniques of manufacture will not be known until the factory site is located and carefully excavated. Until that time, the Yorktown stonewares raise more questions than they answer. The most important of these is the shape of the kilns and how they were fired. The wares run the gamut from such underburning that the iron-oxide slip has evolved no further than a zone of bright-red coloring, to overfiring which has turned the slip a deep purple and the body to almost the hardness and color of granite. Do these differences result from a lack of control over entire batches, or do they stem from temperature variations inherent in different parts of the kiln? Mr. Maloney's experiments, made without the use of saggers, have shown that close proximity to the firebox can unexpectedly and dramatically affect the wares. Thus, one mug of his first test series was placed much closer to the direct heat than were the rest, with the result that it emerged with an overall dark, highly glossed surface somewhat reminiscent of Burslem brown stoneware.

The only real evidence of the Yorktown manufacturing process comes from the many sagger fragments that have been found around the town. The largest single assemblage was discovered on the Swan Tavern site, but another group of large pieces was recovered from beneath the Archer Cottage at the foot of the colonial roadway leading down to the river frontage. In neither instance is it likely that the sherds were serving any practical purpose, and so it is hard to imagine why they would have been taken to these widely distant locations.

The Park Service Yorktown collection includes

Figure 15.—YELLOW LEAD-GLAZED EARTHENWARE CREAMPAN of local Tidewater manufacture, probably dating from the second quarter of the 18th century. Found in Williamsburg. Rim diameter 34.29 centimeters.

sections through three saggers of different sizes, one for holding quart tankards (fig. 12), another for pint mugs, and a third which might have served for the bowls, the last being 5¾ inches in height and having an interior base diameter of approximately 8 inches, with walls ½ inch thick and side apertures 5½ inches apart.[79] These apertures are pear shaped and are common to all the Yorktown saggers, as they are also to the examples excavated at Bankside in London.[80] The tankard saggers have three such holes plus a vertical slit which extends from the top to the bottom to house the handles, but it is not known whether the wide and shallow example described above would have possessed this feature. If this example was intended only for bowls, a slot would not have been needed and an extra aperture probably would have been substituted: but were it also used for pipkins, a handle opening would have been essential. The purpose of the pear-shaped apertures was to enable the salt fumes to percolate freely around the vessels being fired. For the same reason sagger lids sometimes were jacked up on small pads of clay, or the sagger rim scooped out here and there to let the fumes enter from the top. A careful examination of some of the Yorktown vessels shows that those closest to the salting holes received excessive fuming through the sagger apertures, the outlines of which were transferred to the pots in patches or stripes of heavy greenish mottling.

Other kiln furniture found in Yorktown includes fragments of sagger lids having an average thickness of ¾ of an inch and various lumps of clay which served as kiln pads and props.[81] Without knowing the type

[79] U.S. National Park Service collection at Jamestown: Yorktown—the first from the Swan Tavern Site and the others from Project 203, F.S. 8, unstratified material recovered during sewer digging on Main Street, 1956–1957.

[80] OSWALD, op. cit. (footnote 66), fig. IX.

[81] U.S. National Park Service collection at Jamestown: Yorktown, S.T. 1933.

Figure 16.—Lead-glazed earthenware bowl of typical Yorktown type, probably dating from the second quarter of the 18th century. Found in Williamsburg. Rim diameter 18.95 centimeters.

of kilns used it is impossible to determine how the saggers were employed. It is obvious, however, that they prevented the pots from sticking together in the kiln, from being dripped upon by the fusing brickwork of the roof, and from becoming repositories for the salt as it was thrown or poured into the kiln. But, as Mr. Maloney demonstrates daily, it is perfectly possible to make good stoneware without saggers, though wasters will accrue from the mishaps just described. If a single-level "crawl-in" or "groundhog" type kiln is used, the number of pots discarded as wasters is more than offset by the space saved through not using saggers. It can be argued, therefore, that Rogers' kiln was of a type in which the saggers served the additional function of allowing the pots to be stacked one on top of the other instead of being spread over a wide flat area, in which case it is possible that the kiln or kilns were of the beehive variety.[52]

The manufacture of stoneware requires only one firing at a temperature of about 2300° F., and it takes Mr. Maloney approximately 13 hours to burn them, although at Yorktown the use of saggers may have necessitated prolonged "soaking" of up to 24 hours or more. The salt was thrown in at the peak temperature and repeated at least twice at intervals of about a half hour. When the fire was extinguished the kiln would have been allowed to cool for up to two days and two nights before it could be unloaded. Mr. Maloney has stated that his stoneware kiln, which he considers small, takes approximately three hours to load. Thus, if the Yorktown factory worked at full capacity, it probably would have been possible to fire each kiln once a week. But, not knowing how many workmen were engaged in the operation, we would be unwise even to guess at the size of its output. The listing of stoneware and coarse earthenware included in Rogers' inventory is not particularly large, although £5 worth of "crackt" stoneware might have represented a considerable quantity of "seconds" or wasters when one considers that 26 dozen good quart mugs were worth only 4 shillings more.

Pint mugs are the most commonly found stoneware

[52] Mr. Maloney is of the opinion that saggers could just as usefully have served a "groundhog" kiln where they would have enabled the pots to be stacked up to four in height.

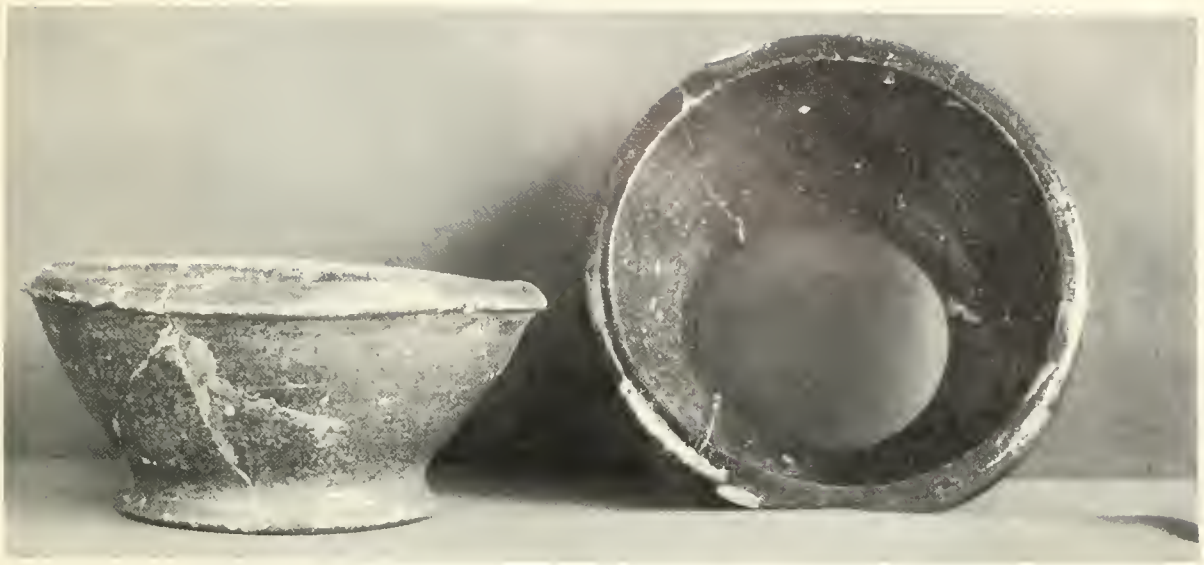

Figure 17.—A PAIR OF BROWN LEAD-GLAZED local earthenware funnels, paralleled by a fragment from Yorktown, discarded in the mid-18th century. Found in Williamsburg. Rim diameters: left, 18.25 centimeters; right, 18.42 centimeters.

relics of the Yorktown factory. Following the "26 doz. q^{t} Mugs £5.4.," a value of 4d. per mug, we find "60 doz p^{t} D^{o} 7.10." [83] A stock of 60 dozen would be reasonable because, as Mr. Maloney has stated, a good potter can throw approximately 12 dozen a day.

Before leaving the evidence of the inventory it should be noted that the vessels which we usually term storage jars are probably synonymous with Regers' "9 large Cream Potts 4/6"; but where are the large stone bottles? The "4 doz small stone bottles 6/" were likely to have been of quart capacity. We can only suppose that the large bottles were not included in the batches fired just before Rogers died and that, consequently, he had none in stock.

The Earthenwares

Besides the stonewares, the inventory includes the following items of earthenware:

11 doz Milk pans £2.4	9 large Cream potts 4.6
9 Midle Sized D^{o} 3/	12 Small D^{o} 2/
2 doz red Saucepans 4/	2 doz porringers 4/
6 Chamber potts 2/	4 doz bird bottles 12/
3 doz Lamps 9/	4 doz small stone bottles 6/
4 doz small dishes 8/	6 doz puding pans 2/

This listing might be read to indicate that the Yorktown factory produced considerably less earthenware than stoneware, a construction that could be supported by the earlier inventory reference to "a pcl crakt redware" with a value of only £2 as against the £5 worth of "crackt" stoneware. We may wonder whether a ratio of 40 to 60 percent may not be a reasonable guide to the proportionate output of coarseware and stoneware, although it must be admitted that we do not know the relative sizes of the two parcels of cracked wares. It must be added also that, besides the inventory, the only extant direct documentary reference to the Rogers' factory products (1745) is to earthenware, not stoneware. Furthermore, we know that 20 years earlier he had sold a considerable quantity of earthenware to John Mercer of Marlborough.

Prior to the discovery of the Yorktown evidence we had known of no stoneware manufacturing in Tidewater Virginia in the 18th century, but archeological evidence had revealed the presence of earthenware kilns in the 17th century, with the possibility of two or three operating at much the same time.[84] It can easily be argued that there would have been more in the 18th century, though no kiln sites have yet been

[83] See WATKINS, Part I, footnote 32.

[84] Op. cit. (footnote 72), pp. 208–220.

Figure 18.—Unglazed earthenware bottle, probably of Yorktown manufacture, discarded about 1765. Found in Williamsburg. Surviving height 23.81 centimeters.

found. These considerations cannot be ignored, and consequently we must carefully avoid the trap of attributing all 18th-century, lead-glazed earthenwares made from Tidewater clay to the Rogers factory. A wood-fired Yorktown kiln burning pottery made from Peninsula clay and coated with a clear lead glaze would produce wares possessing variations of texture and color similar to those emerging from a comparable kiln, say, at Williamsburg.[85] Therefore, in attempting to assess the range and importance of Rogers' earthenwares we must use potting techniques alone as our guide to their identification.

The principal evidence comes from the cut beside Main Street in Yorktown in front of the Digges House,[86] where numerous rim fragments of overfired and unglazed creampans were found. Others were recovered from the edges of the roadways on three sides of the adjacent colonial lots 51 and 55, shown on the 18th-century plat (Watkins, fig. 1) as having belonged to William Rogers. The rims from these deposits flared slightly, were tooled inward, and were flattened on the upper surface (fig. 13, no. 1). Fragments of such bowls, usually coated on the inside with a mottled lead glaze varying in color from light ginger to the tone and appearance of molasses, depending on the color of the body, are frequently found in Williamsburg (fig. 14) and on plantation sites in contexts of the second quarter of the 18th century. This creampan form is one of two made from Virginia clay which constantly turn up in contemporaneous archeological deposits. The second form (figs. 13, no. 2, and 15) possesses an everted and rolled rim,[87] an

[85] It must be stressed that no evidence of any such kiln exists. See also footnote 30.

[86] This material is divided between the colonial archeological collections of the Smithsonian Institution and of Colonial Williamsburg.

[87] I. Noël Hume, "Excavations at Tutter's Neck, James City County in Virginia, 1960–1961," paper 53 in *Contributions from the Museum of History and Technology* (U.S. National Museum Bulletin 249); Washington: Smithsonian Institution, 1966, fig. 19, nos. 1, 3, and 4.

entirely different technique from that described above. I am inclined to doubt that these and their variants were made at the Rogers factory and have termed them products of the "rolled-rim" potter. Nevertheless, a few unglazed fragments of such pans (fig. 13, nos. 2–4) are represented in the National Park Service collections from uncertain archeological contexts in Yorktown.[88] The fact that they are unglazed suggests that they may have been made there, though undoubtedly not by the craftsman who threw the flattened-rim creampans.

Other earthenware sherds from the Digges House group include small, folded-rim fragments which may have come from storage jars or flowerpots. Another fragment was sharply everted over a pronouncedly incurving body. This could have been part of a small bowl or porringer. The Williamsburg archeological collections include a number of bowls of this form, one of which is illustrated in figure 16. A similar rim form is present on a pair of lead-glazed funnels (fig. 17) from a mid-18th-century context at the Coke Garrett House in Williamsburg and on a presumed funnel fragment (fig. 13, no. 5) in the Park Service collection from Yorktown.[89] Also from Yorktown comes the only known porringer fragment (fig. 13, no. 6), a biscuit sherd with a flattened rim and traces of the luting for a handle.[90] Although the type is not represented among stratified finds from Yorktown, mention must be made of an unglazed earthenware water (?) bottle found in Williamsburg,[91] which is clearly a stoneware form and thus probably was made at the Yorktown factory (fig. 18).

Perhaps the most baffling item listed in Rogers' inventory was the reference to "4 doz bird bottles 12", for it was hard to imagine that he would have been making the small feeder bottles for cages which were normally fashioned in glass. However, it now seems reasonably certain that the Rogers bird bottles were actually bird houses. Figure 19 illustrates two bottle-shaped vessels of Virginia earthenware coated with lead glazes identical in color to examples found on a creampan and other presumably Rogers products excavated in Yorktown. The example on the left has lost its mouth but when complete was undoubtedly comparable to the specimen at right. The former was found in 1935 during the demolition of a chimney of the "Pyle House" at Green Spring near Jamestown.[92] It was mortared into the chimney twelve feet above the ground with its broken mouth facing out but with its base stopping short of the flue. The bottle is now in the collection of the National Park Service at Jamestown, and a recent examination showed that it still contained a lens of washed soil lying in the belly clearly indicating the position in which it had been seated in the chimney brickwork. A stick had been thrust through the wall before firing and emerged on the inside at the same point that the lens of dirt was resting. It was apparent, therefore, that the hole was meant for drainage. The stick hole was present in both bottles as also was an ante coctura cut in the base (fig. 20) which removed almost half of the bottom plus a vertical triangle. It is believed that this feature was intended to enable the bottles to be hooked over pintles or large nails which latched into the V and prevented them from rolling. In this way they could have been mounted under the eaves of frame buildings as nesting boxes (or bottles) and although firmly secure when hooked, they could be easily lifted off for cleaning. Evidence of such use is provided by slight chipping on the inner face of the vertical V cut of the second bottle (right) where the bottle had abraded against the nail or pintle.

The date of the Green Spring bottle is uncertain, though the paper label accompanying it says "Probably 1720, date of building of house." However, it is clear that the bottle was not installed in the intended portable manner and it is possible that it was added at a later date. The complete example (fig. 19, right) was recently discovered in a sound archeological context during excavations at the James Geddy House in Williamsburg, being associated with a large refuse deposit dating in the period about 1740–60.[93]

It may be noted that in the 1746 inventory of the estate of John Burdett, tavern keeper of Williamsburg, there are listed "16 bird Bottles 3/".[94] As it seems unlikely that a tavern keeper would have a stock of birdcage bottles when he apparently had no birdcage,

[88] N.P.S. Collection at Jamestown: Yorktown, no provenance.

[89] Bowl 1C.1.18C, Funnels E.R. 140.27A, and National Park Service collection at Jamestown: Yorktown, no provenance.

[90] National Park Service collection at Jamestown: Yorktown, no provenance.

[91] E.R. 157A, C, and G, 27A.

[92] National Park Service collection, J. 13049 (G.S.), with label reading "Pyle House Green Spring. Built into brickwork of chimney—removed in securing brick for Lightfoot House by C. ? T. (10.29.35)."

[93] Colonial Williamsburg archeological collections, E. R. 987D.19B, cat. 3275.

[94] "Inventory and Appraisement of estate of John Burdett," York County Records, Book 20, *Wills and Inventories*, pp. 46–49.

Figure 19.—Two earthenware "bird bottles" believed to be of Rogers' lead-glazed earthenware showing drainage holes in sides. Bottle on left is from a house chimney near Green Spring and, on right, is from the James Geddy House in Williamsburg. Height 18.42 centimeters, and 21.91 centimeters, respectively.

it may be suggested that the reference is to bottles similar to those discussed here. In support of this conclusion, attention is drawn to the fact that Rogers' new bottles were valued at 3d each, while Burdett's (used ?) seven years later were appraised at $2\frac{1}{4}$d.[95]

It seems evident that the Rogers earthenware was fired to biscuit, glazed, and fired again in a glost oven; no other explanation accounts for the large quantities of unglazed earthenware found at Yorktown. Mr. Maloney's experiments at the Williamsburg Pottery have amply demonstrated that the Yorktown earthenware could have been glazed in the green state and would not have required a second firing. Furthermore, the study of a late-17th-century kiln site in James City County has confirmed that not all potters thought it necessary to make glazing a separate process. It is curious that the Rogers factory found it desirable to take this second and seemingly uneconomical step. The making of stoneware certainly would not have been a double-firing operation, and, although some of the pieces actually are fired no higher than the earthenware, they have been slipped and salted. Consequently we must accept the bottle discussed above as an intentional earthenware item which had passed through only the first kiln. Furthermore, its presence in Williamsburg indicates that it was never meant to be glazed. And finally, it should be noted that an unglazed handle fragment, probably from a similar bottle, was among the sherds recovered from the roadway in front of the Digges House.

[95] Since this paper was written and the bird bottles identified, a number of additional fragments have been recognized among mid-eighteenth-century finds from Williamsburg excavations, including a small, pierced lug handle fitting the scar on the Geddy example (fig. 19, right). The hole through the handle lined up with that through the shoulder clearly indicating that their combined purpose was to provide an alternative method of suspension for use when the bottles were hung in trees.

Figure 20.—Bases of the "bird bottles" depicted in figure 19, showing holes for suspension. Base diameters: left, 10.48 centimeters; right, 10.16 centimeters.

Conclusions

The Rogers inventory contains such a wide variety of forms that one may claim without fear of contradiction that his factory was *capable* of producing any of the kinds of kitchen vessels and general-purpose containers that the colony may have required. Consequently, a Yorktown origin may reasonably be considered for any of the wares made from local clay that turn up in contexts of the appropriate period. In the Williamsburg collections are such varied lead-glazed, earthenware items as closestool pans, chamber pots, straight-sided dishes, lidded storage jars, wide-mouthed and double-handled storage bins, pipkins, and chafing dishes. But whether all these things were made, in fact, at Yorktown cannot be known until the factory site is found and excavated.

In the meantime, a few conclusions can be drawn on the basis of the existing archeological evidence. There can be no doubt that the Rogers factory at Yorktown was a sizable operation and that it employed throwers as capable in their own field as any in England. Our slender knowledge of Rogers' own background does not indicate that he himself was a potter. It must be supposed, therefore, that he obtained the services of at least a journeyman potter apprenticed in one of the brown-stoneware factories in England. One can only guess at the center in which this unknown craftsman was trained, but it is more than likely that he came from London and might have worked at Fulham,[96] or more probably at Southwark, or even, perhaps, at Lambeth, the types of sagger and the wares produced at Yorktown being stylistically identical to the fragments found on the latter sites.

Not knowing the number of craftsmen employed, we cannot hope to determine the size of Rogers' output or the number of kilns in operation. But one would suppose that he had at least two kilns, one for stoneware and the other for lead-glazed earthenware, although they could, conceivably, have been interchangeable. An indication that lead-glazed wares were sometimes burned in the salt-glaze kiln is

[96] There is a long-established belief that Fulham was the principal source of 18th-century brown-stoneware vessels. While the art of making the ware was first developed there by John Dwight, the factory fell into decline after his death in 1703 and remained in virtual oblivion until the 19th century.

provided by a single creampan in the Williamsburg collection,[97] which is both lead-glazed and heavily incrusted with salt. It is possible, however, that, knowing that there would be "cold" spots in the kiln,[98] the potter tried to make use of every available inch and inserted a few lead-glazed pieces along with the stoneware.

Documentary evidence relating to the distribution of Rogers' products has been discussed by Mr. Watkins (pp. 83–84), and, although some of it tends to be equivocal, we are left with the impression that both stoneware and earthenware were shipped for trade elsewhere, but that such shipments were probably infrequent and not of large quantities.[99] When seemingly comparable fragments are unearthed on sites beyond the environs of the York and James Rivers one must use extreme caution in attributing them to Yorktown. Clay of a generally similar character lies beneath much of Tidewater Virginia, and, since little serious historical archeology has been undertaken in the state beyond the Jamestown–Williamsburg–Yorktown triangle, it is much too soon to assume that apprentices trained at Yorktown did not set up their own kilns in other counties. In short, techniques of manufacture such as are exhibited by the shaping of earthenware rims and handles should be the only acceptable guide for identification, and even these are not infallible. As for the stoneware, the manufacturing techniques are so English in character that they are of no help. Thus, once the Rogers stoneware was shipped out of Yorktown, it must have lost its identity as totally as Governor Gooch presumably had hoped that it would.

Archeological evidence for the date range of the Yorktown ware is not very conclusive. The Challis site mug seems to have been thrown away around 1730, and this provides the earliest tightly dated context in which the wares have been found. The largest single assemblage of probable Yorktown products was the extensive refuse deposit believed to have been associated with John Coke's tavern in Williamsburg, but this was not discarded before mid-century. Other fragments of stoneware tankards, jars, and pipkins have been found at the Anthony Hay and New Post Office Sites in Williamsburg in contexts ranging from 1750 to 1770, while more, possibly Yorktown pieces, were encountered in a rubbish deposit interred in the period 1763–1772 at Rosewell in Gloucester County. These are, of course, dates at or after which the pieces were thrown away; they do not necessarily have a close relationship with the dates of manufacture. Nevertheless, the recovery of so many fragments from late contexts does suggest that the factory continued in operation after the last documented date of 1745.[100]

The most obvious source for dating evidence is clearly at Yorktown itself, but, unfortunately, little of the large National Park Service collection has any acceptable archeological associations. The fragments recovered from the roadway in front of the Digges House were accompanied by no closely datable items. While it is tempting to associate this deposit with Rogers' tenure as "Surveyor of the Landings, Streets; and Cosways" beginning in 1734,[101] it is also possible that he provided the City of York with road metaling before that date and that after his death his successors continued to do so. The quantity of sagger fragments from the vicinity of the Swan Tavern might have been associated in some way with the fact that Thomas Reynolds (see Watkins, p. 83) occupied the adjacent lot. More sagger fragments were found in the backfilling of the builder's trench around the recently restored Digges House on Main Street, which the National Park Service believes to have been

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[97] Archeological area 2B2, context unknown.

[98] Mr. Maloney has pointed out that a margin of 150°F. is sufficient to make the difference between earthenware and stoneware.

[99] Export records for the York River should be treated with some caution as goods often were imported from one place and later exported to another. But if we accept the 1739 and 1745 *Virginia Gazette* references (Watkins, footnotes 38 and 41) as being to wares of Yorktown manufacture, by the same token we must draw comparable conclusions from the Naval Office Lists for Accomac (Eastern Shore of Virginia), which show "1 shipment" of "stoneware" exported to Maryland in 1749. Similarly we would have to assume that there was an earthenware factory operating near the James River in 1755 when the records list the exporting of "2 crates Earthenware" to the Rappahannock. Such conclusions may, indeed, be correct, though there is as yet no evidence to support them. Naval Office Lists, Public Records Office, London; cf. *Commodity Analysis of Imports and Exports, Accomac, Virginia, 1726–1769*, and for the *Rappahannock, Virginia, 1726–1769* microfilm books compiled under the direction of John H. Cox, University of California, 1939 (unpublished).

[100] *Virginia Gazette*, June 20, 1745.

[101] Watkins, Part I, footnote 37.

constructed in about 1760.[102] But it can be argued that the sagger pieces were scattered so liberally around the town that their presence in the builder's trench does not necessarily imply that the factory was still operating at that date.

In summation, it may be said that the quantities of stoneware and earthenware with possible Yorktown associations which have been found in archeological sites in Tidewater Virginia leave little doubt that the venture established by William Rogers was of considerable value to the colony. There can be equally little doubt that Governor Gooch was aware of this fact and that he gave his tacit approval to the venture by minimizing its importance in his reports to the Board of Trade.

The quality of the products was good by colonial standards, and their quantity impressive. Consequently, in spite of Governor Gooch's misleading reports, William Rogers begins to emerge as one of the pioneers of industry in Virginia. It is to be hoped that it will be possible eventually to undertake a full archeological excavation of his factory site and so enable Rogers to step out once and for all from behind the deprecatory sobriquet of the "poor potter" of Yorktown that has concealed for more than two centuries his name, his acumen, and his potters' talents.

[102] Large numbers of wine-bottle fragments also were recovered from the builder's trench, and provided archeological support for a construction date after about 1760.

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